









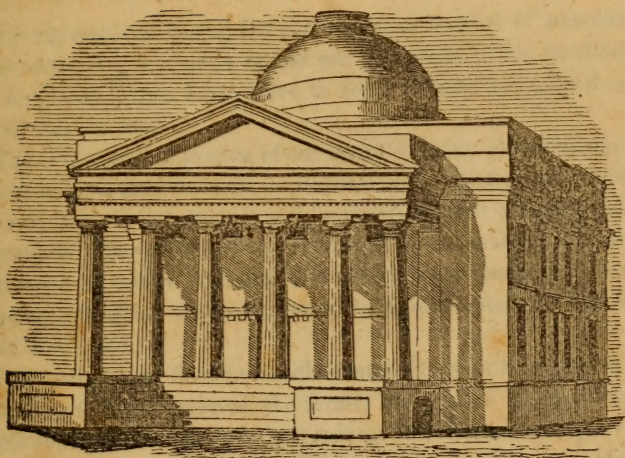


*Dr J A Eve*  
SOUTHERN  
*h Rd*

# MEDICAL AND SURGICAL JOURNAL.

EDITED BY

PAUL F. EVE, M. D.,  
AND  
I. P. GARVIN, M. D.



Medical College of Georgia.

*"Je prends le bien où je le trouve."*

VOL. III.—1847.—NEW SERIES.

Augusta, Ga.  
JAMES McCAFFERTY,  
PRINTER AND PUBLISHER.

1847.

SOUTHERN

MEDICAL AND SURGICAL JOURNAL

Vol. III.

Part I. May, 1817.

J. F. GARRIN, M.D.



Medical College of the South

Printed by J. F. Garrin, M.D.

Vol. III. 1817. NEW SERIES.

Journal of  
the Medical and  
Surgical Society

1817.



# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—JANUARY, 1847.

[No. 1.

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE I.

*Remarks on the use of Quinine in Intermittent and Remittent Fevers.* By L. A. DUGAS, M. D., Professor in the Medical College of Georgia.

Having received during the past season a number of communications requesting my views on the use of quinine in the treatment of our autumnal fevers, I beg leave to reply to them through the medium of this Journal.

The fevers of this section of our country, being almost exclusively paroxysmal, it may be well to premise, very briefly, my views of their pathology, by which it will be perceived that I regard them as essentially different from those *continued* fevers more commonly encountered in colder latitudes, and which have been denominated Typhoid, Typhus, Follicular enteritis, Dothenenteritis, Jail fever, Ship fever, &c.

Our paroxysmal fevers are either intermittent or remittent at their onset; but, if not arrested, the former may, more or less early, become remittent, or the remittent assume the intermittent type; thus showing them to be only different degrees of the same disease. They both present the same paroxysmal phenomena, that is to say, have regular periods of recurrence or exacerbation, and of declension; they are both preceded and accompanied by a general disturbance, more or less marked, of all the functions of the system, but more especially of those usually termed nervous, as those of sensibility and muscular motion. Lassitude, pains in the limbs, back and head, loss of muscular strength, are premonitory and persistent in both. The activity of the circulation, however great, is not continuous as in the phlegmasiæ, but partakes of the same paroxysmal character as the other phenomena. Indeed it may be established as a

maxim, that no inflammatory disease ever assumes the paroxysmal character, inasmuch as all inflammations pursue an uninterrupted course, whether they terminate in resolution, suppuration or gangrene. Wherever inflammation is exposed to ocular observation, it is never seen suddenly to disappear and to return at stated intervals, or otherwise; but it runs a uniform course which cannot be suddenly modified by the efforts of nature nor by any agent with which we are acquainted. Pure inflammation of internal parts, as pneumonia, pleurisy, acute articular rheumatism, enteritis, &c., observes the same course; there is nothing paroxysmal in these diseases; the febrile action is not attended with daily or periodical exacerbations, but gradually progresses to a certain point, and then gradually declines with the subsidence of the inflammation. Periodicity or the paroxysmal peculiarity is characteristic of the neuroses properly so called—of diseases of the nervous system, which modify the functions of remote organs, and which may be dependent upon congestion, but certainly never upon inflammation. We know of no organ, whose inflammation could furnish us any rational explanation of the varied phenomena of intermittent or of remittent fever. Let us however look to the nervous system for the solution of the problem of these fevers, and all becomes perfectly plain. The languor, lassitude, general and local pains, tremor, modifications of the capillary as well as of the general circulation and of the secretions, and, above all, the abrupt transitions from a normal state to one of great perturbation, and from this again to comparative health, together with the periodical returns of the morbid manifestations—all indicate manifestly great disturbance of that pervading system whose condition is reflected in every part of the body—the nervous system. There is no other system whose impairment could by any possibility yield us the phenomena above related; still less is there any single organ that could by any modification of its condition, produce such general perturbation of the acts of the economy. Intermittents and remittents then are unquestionably the manifestations of deranged innervation; and if arrested sufficiently early will be attended with but little injury to any organ. A continuance or frequent repetition of this derangement, however, may more or less seriously implicate the parenchymatous and discerning structures, inducing inflammatory action, and may even terminate in fatal congestions.

With these views of the pathology of paroxysmal fevers, we are ed naturally to the use of such remedies as are calculated to arrest



or to modify the perversion of innervation. Theory alone would indicate a resort to any agent known to blunt the nervous sensibilities, and thus to diminish their mobility or tendency to perturbation. Narcotics would present themselves in the first line. Every one knows that opium, morphine, camphor, alcoholic liquors, sulphuric ether, &c., are valuable remedies in intermittent fevers. Indeed, a favorite prescription with me in such cases is a combination of 2 parts of sulphuric ether, 1 part of tincture of camphor and 1 part of tincture of opium, of which I give a tea-spoonful in a wine-glass of cold water two hours before the expected paroxysm, and half this quantity again at the expected hour of attack; the patient remaining in bed during the effect of the remedy. This rarely fails in uncomplicated cases of intermittent fever; if it does not completely succeed the first day, it will the next. I have frequently averted, or favorably modified even a paroxysm of *remittent* fever by the administration of a full dose of morphine ( $\frac{1}{4}$  to  $\frac{1}{2}$  gr.) half an hour before the expected exacerbation. But the efficacy of narcotics is not so fully borne out by experience as is that of quinine, an agent which as yet holds a position unique in the materia medica. The most striking peculiarity of quinine is its power to prevent the return of periodical affections, and this appears to me to be effected by blunting the susceptibilities of the nervous system. The senses whose acuteness of perception we can most easily observe, are manifestly blunted. Audition is very soon impaired, and so is vision, if the dose of the remedy be large. The effect of quinine on the heart, in our fevers at least, is unquestionably to diminish the force and frequency of its action, and if the quantity administered be large, a general relaxation, attended with a profuse cold sweat, will be produced, resembling and therefore mistaken by the inexperienced for a collapse of fatal tendency. Having tried it in cases of pure phlegmasia, in pneumonia and acute articular rheumatism, for example, without any aggravation of the febrile action, I cannot regard it as a stimulant.

There is, I believe, no difference of opinion in relation to the value of quinine in the treatment of intermittent fevers. I will, therefore, now confine my remarks to Remittent fevers, comprehending under this term, bilious, malignant, congestive, and country fevers. These are usually preceded by premonitions, which if properly attended to, would enable us to avert their development with great ease. It is, however, exceedingly rare that medical aid is invoked thus early, and the physician is generally called in only during the first or second

strong paroxysm; often much later. The paroxysm, when once fully developed, will usually run its course despite of any efforts we may use to check it. I therefore generally direct merely a foot-bath, and the free use of cold drinks, as water, lemonade, or soda water, until the period of remission. Should there be, however, such a determination to some vital organ as to threaten serious injury before the equilibrium of the circulation be restored by the subsidence of the exacerbation, I abstract blood with cups to the spine, sometimes (though rarely) deplete from the arm, and urge the use of revulsives, as hot and stimulating pediluvia, and sinapisms to the spine, epigastrium, feet, &c.; if the head be congested, the affusion of cold water to it, continued until the pulse be depressed, and repeated as this reacts, is the most efficacious application I know of. Saline enemata, especially if the bowels are full, should not be omitted, as cathartics will very rarely act during the stage of excitement. If the congestion be attended with cold clammy skin, a small and feeble pulse, and prostration of the vital energies, I advise, in addition to the revulsives, large and repeated doses of the above-mentioned combination of ether, laudanum and camphor, until reaction take place.

The exacerbation having subsided, our treatment should be directed to the prevention of its return, and my invariable rule is *never to permit the occurrence of another paroxysm after I see the patient*. But, it will be asked, can this rule be carried out? I answer that it can *in the great majority of cases*, and that in those in which we fail to accomplish all we desire, we yet so modify the state of things that success is almost certain on the day following. If we be fully impressed with the belief that the fever being once arrested the patient will rapidly return to health, the importance of the rule cannot fail to be appreciated; and that such is the fact will not for a moment be denied by any one who has ever tried the practice we recommend. I repeat, that if all our efforts be directed to the prevention of another paroxysm—if we resolve never to allow a patient to have another exacerbation after we see him, the cure of remittent fevers will almost invariably be effected in a day or two.

In the accomplishment of our resolve, quinine must be regarded as the sheet anchor of our dependence, for although we may resort to other means, these can never be but of secondary value. Nor is it necessary in ordinary cases to use such large quantities of the quinine as are recommended by some. The quantity I use in one remission is usually from 15 to 20 grs., but I have sometimes given 30 or 40 grs.;

never more. It is rare that less than 15 grs. will prevent the expected paroxysm. Whatever be the quantity we may estimate as necessary, this should be given in such a manner as to have the system fully under its influence an hour or two before the time of the previous exacerbation, and to continue its influence a couple of hours after this time. If the period of remission be eight hours, we may administer 2 grs. hourly—if it be five hours, we may give 3 grs. hourly—if three hours, 5 grs. hourly—and if only one hour, we should give 20 grs. at once, and smaller doses subsequently, if necessary, to insure success. According to my observation the *number* of doses is a matter of but little moment—the *quantity* given in a remission is all important. This will depend upon the violence of the attack, the number of paroxysms that have occurred before we see the patient, and the kind of treatment to which he may have been previously subjected. As a general rule, the quantity should be increased as the period of remission is shortened, and in proportion to the number of paroxysms that have preceded its use. I am inclined to think also that it requires more quinine to prevent a paroxysm in one who has been depleted or acted on by emetics and cathartics than in one who has previously been subjected to no medication. The *convalescence* is certainly more rapid when no debilitating process has been instituted, and health is almost immediately restored if the disease be arrested with quinine on the occurrence of the very first paroxysm. There is some choice in the mode of administration, for the sulphate of quinine will act more slowly if given in powder than in solution, and still more so in pills than in powder. Whenever, therefore, a prompt effect is necessary, the solution should always be preferred. If the stomach will not retain it, it may be thrown up the rectum with a little flax-seed tea or thin starch, in about the same dose as if given by the stomach. In this way it acts remarkably well, and, in the treatment of children, who evince great reluctance to its taste, this mode of administration is peculiarly happy.

But the query is often made: would you give the quinine in cases of remittent fever in which the head is evidently affected,—when there is intense cephalalgia, or coma, or delirium? in cases in which the stomach seems implicated—the patient vomiting frequently and rejecting every thing he takes? in cases in which the bowels are too loose, or very easily disturbed? in cases in which the liver is either torpid or secretes inordinately? in cases in which one paroxysm runs into the succeeding so completely as scarcely to leave any re-



mission of consequence? I answer, unequivocally, yes—and that the stronger the tendency of the disease to localize itself, the more urgent is the necessity to arrest it; for this tendency will increase with every paroxysm, and cease as soon as their return be checked. Let us always bear in mind that the paroxysms are not *occasioned* by the affection of the head, stomach, bowels, or liver, but, on the contrary, that these are the *consequences* of a deranged innervation and of the paroxysmal condition, and our duty is plain. Let us not be alarmed by the bug-bear inflammation and vitiated secretions, nor be deterred from the use of quinine because some still believe it a stimulant, and our success will very soon eradicate every vestige of former prejudices on this subject. It was not without much difficulty that I succeeded a few years ago in persuading a planter, who had long been in the habit of looking on bilious fever as occasioned by the presence of vitiated or superabundant bile, and who consequently treated his negroes with emetics, cathartics and mercurials, that if he would use quinine at the outset, his hands would be in the field in a few days, instead of losing from ten to fifteen days whenever attacked by fever. And yet, after he had fully satisfied himself of the advantage of the proposed change of treatment, his first observation on meeting me was always—"what becomes of the bile? I am afraid that it is still in the system and will again do mischief!"

In order to illustrate some of the positions I have assumed, I will relate a few cases in which the remission was very slight, and the tendency to localization imminent.

On the 12th of October, 1841, I was called to see a lad about 10 years of age, and found him in the height of the second paroxysm of a most violent attack of remittent fever. The pulse was full, strong and active; the heat of the surface intense; he complained of violent head-ache, yet was incessantly tossing himself about the bed in wild delirium; his stomach and bowels were quiet. I had but a few days previous seen a patient about the same age, and in the same neighborhood succumb (without quinine) in the third paroxysm of a similar attack, and I had every reason to apprehend a similar issue in this case, if another paroxysm were permitted to occur. It was now 2 o'clock, P. M. and the next paroxysm was expected to commence at 8 in the evening. He had taken a cathartic the day before I saw him. I immediately opened a vein, to prevent increased injury to the brain, and abstracted blood pretty freely; then applied a blistering plaster over the dorsal region of the spine, and commenced the use

of quinine in doses of 2 grs. every hour. At my evening visit (7 o'clock,) I found him quiet, free from delirium, and with very little fever. Ordered the quinine in doses of 1 gr. hourly through the night. The next morning I found him sitting up, without fever, and wishing something to eat. He had no return of fever, took no more medicine, and was perfectly well in a few days. I would remark that the delirium entirely subsided only, after he had taken several doses of quinine. I have since given it during delirium, without bleeding, and with equally good effect.

On the 28th October, 1841, I was requested to visit a gentleman, about 45 years of age, on the 5th day of a severe remittent fever. I found him with high fever, lying on his back, and so comatose that it was with considerable difficulty that he could be made to notice questions, to which he would then make incoherent replies. His surface was moist with perspiration, though warm. His pulse was frequent, and somewhat strong, but not sufficiently so to warrant bleeding at so advanced a stage of the case, and especially as he was of intemperate habits. He had taken two or three cathartics—and the onset of the next paroxysm was expected in three hours. The case was such, that death must of necessity attend the supervention of another paroxysm. Under these circumstances I ordered 5 grs. quinine in solution every hour, and remained to watch the effects, for I was not at that time as well acquainted with them as at present. Indeed I had not before ventured the use of quinine under a similar determination to the head. The administration of each dose, was attended with manifest improvement, so that when the time arrived for the recurrence of the paroxysm, my patient was perfectly lucid, had no stupor, and but little fever. I then left him, with orders to take 1 gr. of the quinine hourly, for twelve hours. On the following morning he was sitting up, without fever, and had none afterwards. A mild laxative was all he took during the rapid convalescence.

During the same month, I attended a girl 8 years of age, whose remittent fever was marked by great gastric irritation, so as to cause her to reject every thing she took; quinine solution administered *per rectum* as readily controlled the disease in this as it did in the above cases.

More recently, I saw a gentleman who had been seized at 9 o'clock A. M. with a chill, which was soon followed by the most intense head-ache, intolerance of light, pain in the back and limbs, as well as at the epigastrium. Being of a sanguineous and plethoric habit, I

bled him; then applied sinapisms to the spine and epigastrium, and prescribed a beverage of cream of tartar and cold water. In the afternoon I found that the fever was still high, that he had vomited repeatedly, was much distressed with nausea, and had been gently purged. The sinapisms were ordered to be repeated, the cream of tartar to be discontinued, and small quantities of iced water to be used to relieve thirst during the night; doses of 5 grs. quinine (in powder) were left, one to be taken in very little water at 4 o'clock the next morning, and repeated every two hours thereafter. I visited him at 8 A. M. and found that the fever had continued high during the night, and remitted only towards morning. He had taken 15 grs. quinine, and now had but little fever, although the nausea still persisted, and had caused him to reject the quinine twice, but which being repeated was finally retained. During this day the febrile exacerbation was much less intense, and he was kept on the use of iced water with a little lime water added to it. On the following morning, the nausea still being troublesome, and, apprehending that the quinine in solution or in powder would be rejected, I gave it to him in pills, 4 grains every two hours until he had taken 16 grains. These were retained, the nausea gradually subsided with the fever, and in the afternoon he was convalescent. He suffered a little from debility, but without further treatment, he was out in a few days. In this case head-ache and gastric irritation instead of being increased, *subsided* under the use of quinine.

We are frequently called to cases in which we cannot ascertain the periods of exacerbation and of remission because of the ignorance of the patient or of his attendants, or because those periods are not very strongly defined. In such cases we may safely presume that the remission, if there be any, will occur in the morning, as this is most usually the case in these affections. And, under this presumption, I always prescribe about 20 grs. of quinine to be given in 5 grs. doses at intervals of two hours, commencing at the dawn of the next day, without regard to any incidental circumstances. This last injunction is added because without it, the attendant may upon some trivial change assume the responsibility of omitting the remedy at the only time when it might be given with decided advantage. I have known several cases to terminate fatally by such omission to carry out the prescription; the excuse being that the patient had too much fever, or head-ache, or nausea, &c. We not unfrequently see cases so late that the life of the patient depends entirely on our abil-



ity to prevent another paroxysm. No circumstance then must be allowed to interfere with the use of the only certain preventive with which we are acquainted. If it cannot be given in one form it must be given in another; if the stomach rejects it, throw it upon the rectum. At all hazards, give it. If by this course you happen to give the quinine before the remission have been fully established, it will not increase the fever, but on the contrary lessen its intensity, and consequently hasten the establishment of the remission. We frequently induce a very decided remission in cases in which it has previously been very slight, by the administration of quinine a short time after the fever has reached its acme of intensity, as may be seen by reference to the cases just related.

Having thus far restricted my remarks to the use of quinine in fevers uncomplicated with true phlegmasia or inflammation, it is proper that I say a few words in relation to cases we occasionally encounter, in which genuine phlegmasiæ are complicated with remittent fever or the paroxysmal peculiarity. I allude now specially to the form of Pneumonia and Pleuro-pneumonia which has prevailed more extensively in Georgia and South Carolina, (and perhaps in other southern states) during the last year or two than formerly, and which has been attended with an extraordinary degree of mortality. From what I have seen of such cases, and learnt from my professional brethren here, and elsewhere, I am satisfied that whilst the most striking element of the disease is an inflammation of the pulmonary organs, this is complicated with remittent fever. Indeed they present regular diurnal or tertian exacerbations and remissions of such decided character as to mislead the friends of the patient, and even his physician, into a degree of security which has often proved fatal. Seized with a violent attack of pneumonia, the patient finds himself at once quite ill, but is soon relieved from anxiety by an apparent amelioration of his condition. This continues until the next day, or perhaps the third, when another exacerbation supervenes and rapidly aggravates the condition of the lungs; but the intensity of the symptoms again abates, and the patient is flattered with the hope of approaching convalescence, until a repetition of the paroxysmal affection places his life in imminent peril, if not beyond the reach of remedial means—and all this notwithstanding a vigorous antiphlogistic course of treatment. This disease has been particularly fatal on our plantations, where the daily or tertian amendments of the patient have induced the owners or overseers not to call in medical aid as early as they would have otherwise done.

In all the cases of pneumonia, complicated as above stated, that have come under my observation, I have not hesitated to combine the use of quinine with that of the lancet, antimonials and opiates, and have uniformly had every reason to be entirely satisfied with the result. They do not require, nor can they bear, the same amount of depletion usually regarded as necessary in common pneumonia and pleurisy, and they very rarely yield to antiphlogistics alone. In furnishing my own testimony to the efficacy of the suggested combination, I might add that of other practitioners of distinction, who, entertaining the same views with myself, have met with similar success. It is scarcely necessary to add that the quinine should be given during the periods of remission, and as liberally as though there were no organ in a state of inflammation.

I have now freely and without reserve, given my views in relation to the use of quinine in our remittent fevers—and in lauding, as I have done, its efficacy, I cannot but apprehend that the charge of ultraism will be preferred against me by those who are still unacquainted with its properties. Be this as it may, I fear nothing from the test of time and experience, and will be amply compensated for the temporary odium, if this article will induce any who may have been backward in the use of quinine to give it a fair trial under the circumstances here recommended. It should be borne in mind, however, that we occasionally meet, even in this latitude, cases of typhoid fever, or of enteritic fever, in which quinine possesses no peculiar efficacy. But these fevers do not present the paroxysmal type, and can therefore be easily distinguished from those in which it is useful.

---

#### ARTICLE II.

*The propriety of large doses of Calomel in Dysentery and Cholera Morbus.* By W. F. BARR, M. D., of Greenville, Tennessee.

If we examine the standard works upon practice, in the treatment for dysentery and cholera morbus, we find *small* doses of calomel, in combination with opium, recommended. For reasons which will be made known, I have been induced to depart from this mode of treatment.

In endeavoring to give the reasons for this deviation from a system, recommended by some of the *first* men in the profession, it will be-

come necessary to speak first, of the influence of the bile upon the intestines; secondly, of the pathology of these diseases.

*The influence of the Bile upon the Intestines.*—From time immemorial to the present period, the opinion has been entertained that the bile acts as a *stimulant* upon the intestines, and thereby keeps up regular peristaltic motion. A denial of this opinion may appear, to the minds of many, as heterodoxical; but fair reasoning, founded upon *truth*, ought to satisfy the most sceptical.

The bile is not a *stimulant*, but a *sedative*; and to its sedative influence the intestines owe their healthy action and regular peristaltic motion.

Although many contend that the bile is a *stimulant*, and that it is to an *increased* quantity in the intestines, which causes them to become excited, yet we find many others, equally as learned and experienced, asserting that such a condition is owing to a *deficiency* of bile. This, then, is our opinion: from sudden suppression of perspiration, the influence of malaria, cold, vicissitudes of weather, &c., the liver becomes torpid, and, consequently, there is a deficiency in the quantity of bile. The intestines thus being deprived of an accustomed *sedative*, are excited, and irregular and diseased action are the consequence.

This is proven from the fact, that in the early stages of the diseases spoken of, the stools are not of a bilious color, but *white, pale, &c.*; and that in the treatment *dark, or bilious* discharges are hailed as ominous of improvement. Now, if this excited condition of the intestines be owing to *too great* a quantity of bile, why are dark, or *bilious* colored discharges looked for with such anxiety? To believe that the bile acts as a *stimulant*, and that it is owing to the presence of *too great* a quantity of this stimulant, and then use medicines to make the discharges of a *bilious* color, seems too much like curing a burn by placing the person injured in the fire!

In those diseases in which the intestines are in an excited condition, and the stools are of a pale or white color, their recovery to a dark or *bilious* color, (at which time there will be an improvement,) proves, incontestibly, this excited condition is owing to the *absence* of the bile, and that when restored, its action as a *sedative* allays the irritability and excitement. From these facts, we contend that the bile is a *sedative*.

*Pathology of Dysentery and Cholera Morbus.*—Believing that the bile is a *sedative*, we contend that the excited condition of the intes-



times in these diseases is owing to the *absence of the bile*—to the *abstraction of an accustomed sedative*.

*Treatment*.—Entertaining the views advanced in relation to the influence of the bile, and the pathology of dysentery and cholera morbus, the main and important indication to be fulfilled, is to *procure*, or *increase* the secretion of bile, in order to have its *sedative* influence to allay the excitement of the intestines. To accomplish this object we give calomel in *large* doses. We know there is no remedy which acts so certainly and powerfully upon the liver as calomel. If, then, we wish to increase the quantity of bile, shall *small* or *large* doses of the article which we know will accomplish our object, be given! Although Dr. Eberle, in his system of practice, contends that in cholera morbus there is a *deficiency* of bile, yet he recommends calomel in *two grain* doses. But, under this opinion, is such practice correct? This can be answered, by referring to efforts to excite any secretion. If, for instance, we desire to increase the flow of saliva, will a *small* or a *large* quantity of an article be taken in the mouth? Would not every one use a *large* quantity? Upon this principle of reasoning, we argue,—in these diseases we wish to increase the secretion from the liver,—then, of course, we would not recommend a *small* dose of the remedy we know will do so, but rather a *large* one. Therefore, in dysentery and cholera morbus, where there is deficiency in the quantity of bile, we wish to increase it,—for which purpose we give *large doses of calomel*. In those cases which I have attended, I have administered it not in larger doses than 20 grains, though the quantity should be modified, or *increased*, according to circumstances. I give 20 grains every six hours, until the stools become *dark* and *fetid*.

CASE. Mr. M. had been confined some ten or twelve days with dysentery. When I saw him he was very pale, pulse small and weak, tongue furred, disagreeable taste in the mouth; the discharges were frequent and painful. I prescribed calomel in 20 grain doses every six hours until the discharges were dark and fetid. He took but *two* doses, which had the desired effect, and in *two* days he was able to attend to his business.

Other cases of both diseases could be given, but it is deemed unnecessary, as the treatment and results were the same as the one given.

I have endeavored to be *brief*, but it is thought enough has been said to convince any one.

It is due to the learned and talented professor to say, that for the above views I am principally indebted to Dr. Cross, formerly Professor of Institutes in Transylvania University, but now of Memphis Medical College. Although Dr. Dick, in his treatise "On the Organs of Digestion," advances the opinion that the bile "has a *sedative* effect on the intestines," yet to Dr. Cross is the credit to be given for having *first* advanced the opinion and taught the doctrine, and also having recommended the practice which should be pursued under this theory.

---

ARTICLE III.

*A Fatal Case of Mechanical Obstruction in the Bowels, (conglomeration and adhesion of the ileum above a reducible hernia,) with the post-mortem appearances.* By PAUL F. EVE, M. D., Professor of Surgery in the Medical College of Georgia.

The frequent occurrence of obstinate constipation, and too often unfavorable termination in such cases, give an importance and interest to the subject, which should lead every honest and candid physician to record and publish every thing he may meet with in his practice bearing upon this point. The writer is aware there is nothing very peculiar in the case he is about to report, but it will be adding another fact to the many causes producing obstruction to the bowels, and even to a fatal extent; and it may besides possess some novelty and interest.

Thomas Newell, aged 30 years, entered the Augusta Hospital on the 14th November, for constipation of the bowels; having had no evacuation from them since the 10th. He was a laborer on the Augusta canal, had had intermittent fever during the fall, and some time ago was attended by a physician for some difficulty in urinating. From his wife I learn, since his death, he was ruptured, but had never worn a truss. In his last sickness, catheters or bougies, or probably both, were used. From sickness in my own family, Dr. Garvin visited this patient for me the afternoon of the day he entered the hospital, and prescribed 15 grs. calomel, to be taken at bed time.

Sunday, 15th. Had, in addition to the calomel, taken a dose of castor oil before visited. Complains of soreness and pain over the abdomen, has no fever, borborygmus, considerable tympanites, with

eructations and anorexia. Prescribed a large warm mustard poultice over the abdomen, and salt-water injections, to be administered at once. In the evening, no relief being obtained, the long stomach tube was added to the glyster pipe.

16th. Was called to patient. Has now copious stercoraceous vomiting; indeed the quantity ejected was enormous. Has had little or no evacuation downwards from the intestines. A concealed inguinal hernia of the right side was now detected, but it was reducible, and had no symptoms of inflammation or strangulation. The patient, though asked, never located his sufferings in this part of the abdominal contents. The finger in the rectum, pushed high up, met with resistance towards the bladder, offered apparently by the intestines impacted in the pelvis. Difficulty being experienced in passing the tube into the colon, the patient was placed upon his elbows and knees, and it then entered much easier. Cold water was freely injected, with a view to condense the flatus. It was returned with but little fæcal matter. Melted lard was now freely given in half pint doses, and was retained for some hours. At the evening visit, a blister to cover the abdomen was put on, and when it acts, a drop of croton oil is to be given every hour.

17th. Patient is worse. Took eight drops of the croton oil without any relief. Dr. Ford called in consultation. Table-spoonful doses of pulverized charcoal were given. Injections still continued. Wine and good nourishment ordered.

18th. Vomits still occasionally—is much weaker—has hiccups at times. The blister has acted well. No increase, but diminution of tympanites. The hernia descends whenever he assumes the position to evacuate the enemata, but is restored by pressure. Recommended still to use the long injecting tube with warm water or stimulating fluids, and such nourishment as the stomach would bear.

19th. Died at 4, P. M.

Post-mortem at 8, A. M., on the 20th, by Dr. Campbell, Demonstrator of Anatomy, and in the presence of the medical class.

No great emaciation. Blistered surface over the entire abdomen. No great distention of it. Removed the anterior abdominal wall. The small intestines, particularly the ileum, were distended and were very red, near the cœcum of a dark, approaching to a black color, and seen through the peritoneum. The hernial sac was laid open, and a small knuckle of intestine found occupying it. This sac was quite thick, much condensed tissue forming its parietes. The pro-



truding viscus was loosely attached to its internal surface by recent exudation of plastic matter or fibrin. These attachments were readily broken up, and the hernia was reduced. The sac was of ancient formation, but the agglutination of the intestine to its internal face was recent. The hernial tumor was a portion of the ileum, about four inches above its termination at the ileo-cæcal valve. It was gangrenous, and the same condition continued up for several inches in this intestine, which was found convoluted and agglutinated, and formed an irregular tumor as large as a common sized apple pressed down into the pelvis. The adhesions of this portion of the ileum were firm, and required the knife for separation. They were evidently ancient, and not the result of the attack from which the patient died. There were neither recent effusions of much serum or of any fibrin, (except that mentioned in the hernial sac,) or other symptoms of peritonitis. Some eight to twelve inches of the ileum constituted this mass or ball. The internal surface of the obstructed portion was gangrenous, and its mucous membrane detached at places by ulceration or mortification. Its calibre could not well be judged of, as the adhesions had previously been divided, before laying open the intestine, but their conglomeration amounted to a perfect stricture, judging from the accumulation of flatus and fluids above it. The ileum contained a muddy, semi-fæcal or semi-purulent matter, besides flatus. The rectum and colon were much contracted, emptied by the injections.

This patient then evidently died from an obstruction in the bowels existing above the reducible hernia. The adhesions of the ileum may have occurred at the time of the difficulty he experienced in his urinary apparatus, for they were situated just above, if not upon the bladder, and the complete stricture of which he died on the 19th, was superinduced upon this condition of the parts on or about the 10th, probably by some imprudence. The hernia of itself had nothing to do with his death directly.

Knowing a hernia existed in this case, the operation of Callisen or Littre, recently revived, and one of them performed successfully by Amussat, was not proposed.

## PART II.—REVIEWS AND EXTRACTS.

## ARTICLE IV.

*Researches upon the Blood.* By M. DUMAS. (Translated for this Journal, from the August number of the *Annales de Chimie et de Physique*: by Jno. M. B. HARDEN, M. D., of Liberty Co., Ga.)

The blood contains three nitrogenized organic principles which are essential to its nature and its functions, viz., fibrine, albumen, and the red globules. Their abundance in the blood or the importance of their offices has long drawn to them the special attention of chemists and physiologists.

But if it has been a very easy matter to separate the fibrine from the blood by the simple process of beating (battage) after obtaining it from the vein; or no less easy to procure the albumen by allowing its serum to separate by spontaneous coagulation; this is not the case when we wish to obtain the red globules free from all fibrine and albumen.

Recently, however, a peculiar process first pointed out by Berzelius, and afterwards more fully developed by M. Muller, has suggested to MM. Lecanu and Figuier\* a method of obtaining the globules free from all mixture. This method is founded upon a modification which the blood undergoes, by its admixture with certain salts, in its transmissibility through the pores of our filtering paper. If we pour some blood, which has been beaten and deprived of fibrine and consequently fluid upon a filter made of joseph paper, we see the globules of this blood pass through the filter, and the filtered fluid will be of a deep red color. The filtration, which in such a case is slow and tedious, leaves upon the filter nothing but a residue of globules, altered in appearance and so small in quantity as to render it impossible to study their properties.

But if, before filtering the blood, we mix it with three or four times its volume of a saturated solution of sulphate of soda, this mixture will so modify the properties of the liquid in which the globules float that it passes through the pores of the paper, leaving behind all the globules upon the filter. It drains off completely colorless and altogether limpid, and as the process is generally rapid the globules may be collected in a satisfactory state of purity and integrity.

The application of this process, however, is not devoid entirely of some difficulties, which are worthy of attention, because of some circumstances connected with the nature and office of the red globules which they make manifest.

For example, if we take blood deprived of fibrine, but kept for many hours, and attempt to filter it after the addition of even an increased

\* An interesting paper upon this subject, from the pen of M. Figuier, may be found in the 11th vol. of the *Ann. de Chimie et de Phys.*, page 503.

quantity of sulphate of soda, the fluid passes with difficulty and is always colored.

It is necessary, therefore, that we operate upon blood recently drawn from the animal. As soon as it has been well beaten and all the fibrine is coagulated, we should pass it through a fine piece of linen and receive the fluid into a solution of the sulphate of soda. The mixture being now thrown upon a filter, we obtain a fluid perfectly limpid with a slightly yellowish tint, and all the globules will remain upon the filter.

But soon, however, the liquid which has been drained off being replaced by a fresh solution of the sulphate of soda for the purpose of washing the globules, we see it pass through colored, feebly at first, afterwards a little more so, and, at last, the color becomes so deep that we cannot doubt that the globules have been greatly altered in their properties.

Yet it is necessary, in order to obtain the globules pure, to wash them many times with the solution of the sulphate of soda—without which they will remain impregnated with the serum of the blood, that is to say, with an albuminous fluid whose presence will entirely conceal their true characters.

After a good many useless attempts, I have found in the globules of the blood a remarkable property by means of which this difficulty may be avoided.

As long as the globules of the blood are in contact with air or aerated water; as long as, in one word, they are in the arterial state the solution which contains them passes colorless through the filters and leaves them all behind.

But, on the contrary, as soon as these same globules have taken the violet color which characterizes venous blood, the filtered fluid becomes colored.

It is necessary, therefore, to maintain the globules in the arterial state during the continuance of the filtration and the washings. This I have been able to do in a satisfactory manner, by plunging into the filter a slender tube, by means of which I direct a constant and rapid current of air through the fluid.

Thus treated, the globules are deposited with some difficulty from the fluid, which is now maintained in a state of aeration favorable to the permanence of the arterial condition.

I throw, therefore, upon a large filter moistened beforehand with a solution of sulph. sodæ, the blood just after its passage out of the vein, but deprived of its fibrine, and diluted with a solution of sulph. of soda—a continual current of air passes through the liquid which is contained in the filter—a tube connected with a solution of the sulphate of soda supplies continually the loss of the fluid which is drained off.

By means of these precautions, the globules of the blood may be completely separated from the serum. Nevertheless, when we wish



the operation to succeed, it is necessary to neglect nothing that can ensure its rapid execution.

As soon as the globules have had time to be deposited upon the sides of the filter, and form there a layer of sensible thickness, those which are in contact with the surface of the paper cannot be longer acted upon by the air and pass immediately to the violet, whilst those which make up the exterior layer preserve the arterial state, and evidently arrest all the air contained in the washings.

In consequence of this the fluid passes colored, and if we do not immediately remedy this difficulty, its increasing coloration will soon demonstrate that the globules have undergone a great alteration.

Under these different circumstances the globules of the blood behave as if they were truly *living beings*, capable of resisting the solvent action of the sulphate of soda, as long as their vitality continues, but yielding to the action as soon as they become asphyxiated, which results in this case from a deprivation of air, and which is manifested with singular rapidity, either by a change of color, or by their prompt solution.

Hence the object of the chemist must be to preserve the vitality of the globules, and among the means which present themselves to the mind we may mention the agitation of the fluid, its constant aeration, and lastly, the keeping of the blood at the same degree of temperature at which it was found in the body of the animal.

All these precautions being followed, we are furnished in a few hours with pure globules, provided we do not undertake to prepare more than five to six grammes at one time.

This rapid alteration of the globules, as soon as they are deprived of the direct contact of air, or of aerated water; the extreme energy with which, in a layer of globules, those which occupy the surface appropriate to themselves the whole of the oxygen, causing a fluid to pass to those below, which is entirely unfit to arterialize them, are circumstances well calculated to fix the attention of physiologists.

In the discussions in which the respiration has been the object of our inquiries, the blood has always been regarded as a homogeneous fluid, receiving the contents of the air in the lungs, and undergoing there more or less rapid alterations.

Doubtless the *serum* of the blood does constitute such a fluid, nor will I dispute the part which it may take in the phenomenon of respiration; but the globules of the blood compose so many vesicles floating in this serum, having a respiration peculiar to themselves, whose effects, connected with those resulting from the respiration of the serum, produce by their *ensemble* the general phenomenon of the respiration of the blood.

We may say, therefore, laying aside for the present the proper action of the *serum* upon the air, that the respiration of one of the superior animals, and particularly of man, has for its object the contact of oxygen with the globules of the blood and the expulsion of the products into which they are converted.

Hence, if we wish to calculate the effects of respiration, we must take into consideration the membranes which form the envelope of these globules, for we know how very different from a pure and simple solution of a gas are those strange phenomena of endosmose which take place through membranes which separate two reservoirs filled with different gases, or with fluids saturated with these gases.

Respiration, in order to be well understood, must therefore be studied in these vesicles or blood-globules, the principal seat of those phenomena which it is destined to produce, and whose organization complicates so strongly the physical laws which govern it.

The manner in which these blood-globules act upon the surrounding or dissolved air, and the conditions under which they preserve their normal character, become, when thus regarded, subjects of the highest interest.

To determine the integrity of the globules and the existence of their fundamental property, we have two means, both of which are equally exact, the microscope and the agitation of them with oxygen—as long as the globules are entire the microscope will indicate it: as long as they may be arterialized they will redden in contact with oxygen.

Now every body knows that the blood possesses these two characters whilst it is circulating; nor does it lose them after its escape from the animal. The beating of the blood, by which the fibrine is separated, does not injure the globules nor deprive them in any way of the property of becoming arterialized.

In this phenomenon the albumen is no more needed than the fibrine. When we gradually replace the serum in which the globules are suspended, by a solution of sulphate of soda, they preserve no less their integrity, and they become no less reddened by being agitated with oxygen.

Thus the faculty of assuming the brilliant color of arterial blood belongs to the globules; it is independent of the albumen, of the serum, of the fibrine of the blood, and of the vital action of the animal.

But if the sulphate of soda preserves this property of the globules, will this be the case with all the alkaline salts? By no means—experiment proves this.

The common phosphate of soda which exists in the blood, may, like the sulphate, saturate the blood without in the least destroying in it the property of becoming arterialized. Blood saturated with phosphate of soda, when agitated with oxygen, receives a brighter arterial tint than it would have done without it.

In regard, therefore, to this property at least, the blood may without inconvenience have added to it much larger quantities of the sulphate or phosphate of soda than it naturally contains.

The salts formed from the organic acids, such as the salt of Seignette, are similar in their effects, which leads us to believe that the lactate of soda may exist in the blood, even in large proportion, without producing any ill effects in this respect.

But is this the case with common salt or chloride of potassium? Experiment shows that these salts are altogether different in their effects.

If we saturate blood deprived of fibrine, although fresh, with common salt, and agitate it immediately with oxygen gas, it remains of a sombre violet hue. Sal ammoniac produces the same effect.

Does there not exist an intimate connection between these phenomena and the supposed injurious effects of salted meats in the production of scurvy? Must we not also find some agreement between the action of sal ammoniac, upon the blood, and the poisonous properties of this and other ammoniacal salts upon the body?

But however this may be, it is certain that there are some salts which leave the blood the property of becoming arterialized, whilst there are others which entirely destroy this property. The sulphate and phosphate of soda and the salt of Seignette belong to the first division; the chlorides of potassium, sodium, and ammonium to the second.

With these results, there is one circumstance connected which cannot fail to arrest our attention. Those salts which maintain in the blood the property of becoming arterialized, are at the same time the best adapted to preserve the integrity of the globules, and they give it the property of furnishing a colorless serum by filtration. On the contrary, those which take away this property cause the filtered serum to be more readily colored.

The whole of these experiments lead us to believe that the coloring matter of the blood is peculiarly fitted to take on the characteristic tint of arterial blood, when it is connected with the globules themselves, of which it forms a part. This character is modified, or lost, when by the alteration or destruction of the globules, the coloring matter enters truly into solution.

By comparing with great care specimens of the same blood, brought into contact with alkaline salts, and allowed to be saturated with these salts in the cold—it appears to me that generally these saline solutions, agitated with oxygen, act in the following manner:

Those salts containing complex organic acids, as the tartaric and citric, preserve the integrity of the globules much better than the salts formed from the mineral acids.

Those salts which have soda for a base, are better fitted to maintain this integrity than those with potash or ammonia as the base.

There appears, therefore, to exist an unexpected relationship between the integrity of the globules, the arterial state of the blood, the phenomena of respiration, and the nature or the proportion of salts dissolved in the blood.

It requires only a few experiments of this kind to be convinced that asphyxia may be induced in the midst of air, or of oxygen gas, without any apparent change in the phenomena of respiration, by the simple introduction into the blood of those salts which modify the action of the oxygen upon the red globules.



We cannot but call the attention of physicians to this order of phenomena. At a time when the analysis of the blood attracts with so much reason their regards, it is to be hoped that the study of the globules, in certain well understood diseases, should become the object of peculiar investigation.

Every thing leads us to believe that, in their less or greater, and slower or quicker alterability, there exist degrees which may be ascertained and measured by receiving the blood from a vein into a solution of sulphate of soda, for the purpose of subjecting it to different trials, or even after defibrinization, by attempting to alter it by graduated doses of well chosen salts, such as common salt (chloride of sodium), or sal ammoniac (chloride of ammonium).

The greater or less resistance of the globules to the alterative operation of these salts, would furnish indices which nothing could replace at present in our diagnosis of Diseases of the Blood.

The elementary analysis of the blood globules, when once they are isolated, is so easy that I have been able to go through it with full confidence in the results. The globules of the blood, deprived of serum and collected on a flat dish, placed in the vacuum of an air-pump on which is pure sulphuric acid, yield in a short time a residuum perfectly dried. This, treated by ether and alcohol, at the boiling points, becomes insoluble in water which may now be used to remove any sulphate of soda remaining in the globules. It is after this preliminary treatment that I have made an elementary analysis. The following are the results, neglecting the ashes :

|           | GLOBULES OF BLOOD,  |                  |             |                     |
|-----------|---------------------|------------------|-------------|---------------------|
|           | <i>Of a Female.</i> | <i>Of a Dog.</i> |             | <i>Of a Rabbit.</i> |
| Carbon,   | 55.1                | 55.1             | 55.4        | 54.1                |
| Hydrogen, | 7.1                 | 7.2              | 7.1         | 7.1                 |
| Nitrogen, | 17.2                | 17.3             | 17.3        | 17.5                |
| Oxygen,   | 20.6                | 20.4             | 20.2        | 21.3                |
|           | <hr/> 100.0         | <hr/> 100.0      | <hr/> 100.0 | <hr/> 100.0         |

It appears evident from these analyses, as we may have concluded from their properties, that the red globules belong to the family of albumenoid bodies. If the carbon which they contain is a little greater than that of caseine and albumen, it is because in the red globules there exists a coloring matter which accounts for this excess.

I will examine, however, in a subsequent memoir, the question, whether the matter of the red globules may be confounded with albumen or caseine, or whether, as appears probable, it may not be distinguished from these substances altogether, as well as the fibrine itself.

---

*History of Seven Cases of Traumatic Tetanus, treated successfully by Strychnine.* By J. W. FELL, of New York.—(New York Journal of Medicine.)

DEAR SIR :

In compliance with your request, I herewith furnish you with the histories of seven cases of tetanus (six of them *certainly* traumatic, and most probably the seventh), which have been treated by strychnine with success. The first two were published in the New York Medical and Surgical Reporter, but as they will be more interesting in connection I send them to you. The 6th case was furnished me by Dr. Botsford, the 7th by Dr. Vanderpool, of Fourth-street.

You will observe that in every case, as soon as the specific twitching was produced, the tetanic spasms abated, and they convalesced rapidly. I have found this distress over the diaphragm (caused, no doubt, by its spasmodic contraction) the most troublesome symptom in all the cases.

I would, from the experience I have now had, administer the strychnine as follows. I should at once give an eighth or tenth of a grain, then, in two hours, the sixteenth, then reducing the dose just sufficient to produce its effect after each one. The great object is to produce the twitchings as soon as possible, they can then be kept up by a much smaller dose than the one which first produced them.

Hoping they will meet your approbation,

I remain yours very truly,

New York, Oct. 9th, 1845.

J. WELDON FELL, M. D.

DOCTOR LEE.

*On the use of Strychnine in Tetanus.*

CASE 1.—Aug. 1st, 1845. Visited William Ellsworth, aged 7 years, living with his parents, in Hudson county, New Jersey. Found him in a kind of stupor, but upon his father's taking hold of him, he was thrown into a violent spasm which lasted a few minutes, during which his body was curved backwards, jaws set, countenance distorted, and his body resting entirely upon his head and heels. After the spasm ceased, he complained of pain and distress over the diaphragm, jaws stiff, and almost closed, difficulty in swallowing, pain along the spine, and soreness in the left groin. The spasms were excited by touching him, or by his attempting to swallow. During the spasms the muscles were so rigidly contracted that he could be raised by his head alone.

About ten days ago he injured his left knee with a thorn. While playing a few days after, it commenced swelling, and to be painful; but by the application of some domestic remedies, the swelling was reduced, and the pain allayed. Soon after he became restless and uneasy, complained of distress about the præcordial region, pain in the masseter and temporal muscles; his voice changed, he had difficulty in swallowing, and these symptoms were attended with slight

fever. These symptoms increased until yesterday, when the characteristic spasms of tetanus set in. His mother immediately applied a blister to the knee and one to the spine. The glands in the left groin were enlarged and tender.

The case was evidently one of traumatic tetanus, well developed and rapidly advancing, and demanding the most vigorous treatment. I at once determined to administer some one remedy, and to continue its use until some decided effect was produced by it. I reviewed in my mind the many remedies heretofore used, viz., opium, alcohol, turpentine, iron, digitalis, tobacco, aconite, &c., &c., and knowing they had all failed, in the majority of cases in which they had been used, I, from a suggestion of Professor Mott's, during the previous winter, determined to use the strychnine, and at once prescribed it in doses of the fourteenth of a grain, every two hours. I also ordered a poultice to the knee, and the spine to be rubbed with ung. tart. antimoni. The strychnine produced its peculiar twitching effects after the fifth dose. It was given as above for two days, each dose after the fifth producing the specific effect. The intervals between the doses were now increased, until, on the sixth day, he only took it three times. He had no spasm after the second day; he convalesced slowly, until the sixteenth day, when the strychnine was discontinued, as he had entirely recovered.

I have frequently seen his father since, and he informs me the boy has enjoyed perfect health.

CASE II.—Oct. 4, 1846, 10 o'clock, P. M. Was called in haste to see Miss M——, of Sullivan street, aged 25 years, under the care of Dr. E. Vanderpool. Found her in a spasm; the muscles of the left side only being in a contracted state; jaws set, left leg and arm stiff, body bent to the left side, extremities cold, pulse feeble, and left side of the face distorted. Ordered some wine, as soon as the spasm passed off, and she could swallow. Dr. Vanderpool having been at once sent for, now arrived, and gave me the following history of the case. Miss M. had been suffering for several months with a bad toe, the nail of the great toe of the left foot having grown under the flesh. She had not been out of the house for months, she refusing to have the nail removed. A few days ago, however, she consented, and Dr. Vanderpool removed a part of the nail; the next day she went out riding, and directly after her return, the toe commenced swelling, and to be very painful, the pain extending up the leg, side, arm, and soon affecting the temporal and masseter muscles of the left side.

Dr. Vanderpool and myself examined and found the toe and foot much swollen and tender, the lymphatic glands of the left groin enlarged and painful, the muscles of the left side contracted, jaws stiff, but not entirely closed, difficulty in swallowing, masseter and temporal muscles contracted and painful, and uneasiness about the præcordial region; during the spasm the diaphragm was powerfully contracted. Considering this also a case of traumatic tetanus, I



suggested to Dr. V. the use of strychnine in this case; he preferred, however, waiting until morning. He made a free incision upon the toe, and prescribed the following:

R Tinct. Assafoetidæ  
 “ Opii aa } a teaspoonful every two hours.

Oct. 5, 10 A. M. Upon visiting the patient this morning, we found her much worse. Spasms more severe and frequent, jaws nearer closed, and the difficulty of swallowing greater. We gave her

R Strychnin. gr. jss.  
 Extract. Juglandis C., 3ss. } ft. pill no. xvj. one every two hours.

10 P. M. Was called in haste to see the patient, as her friends thought her dying. We found her under the specific effect of the strychnine. Ordered the pills discontinued until morning.

Oct. 6, 10 A. M. The patient slept well from 12 to 4 o'clock this morning, being the first sleep she has had in some days. She is much improved—ordered one pill every three hours.

7 P. M. Has had some slight spasms during the day; jaws a little relaxed; gave her wine whey, to be continued as above.

Oct. 7. Miss M. slept well during the night, and the irritability which had been so marked, has in a great measure disappeared. The twitching is produced by each pill: it commencing about twenty minutes after taking the pill, and lasting about fifteen.

Oct. 8. No spasm since yesterday; ordered one pill every six hours; continue the wine whey.

Oct. 10. Discontinued the pills, as the tetanic symptoms have all disappeared.

Oct. 16. Miss M. is going out as usual, quite well.

The only peculiarity about this case, was the contraction being confined to the left side, making it a case of *Pleurosthotonos*.

CASE III.—Nov. 15. Visited Mrs. J., of Thompson street, aged 27 years. About ten days ago she ran a needle into the palm of her hand; it breaking, a piece was left in the wound. This was removed by a barber in the vicinity within a few days; but the hand and arm continued sore and painful. Yesterday she complained of having taken cold, as her jaws were stiff and deglutition painful. During last night she had hot flushes and chills. I found her complaining of difficulty of swallowing: jaws very stiff, and nearly closed: pain and distress in the diaphragm, and some slight spasms. Ordered the following:

R Strychnin. gr. j.  
 Ext. Juglandis 3ss. M. } in pill nos. xiv—one every two hours,  
 the hand to be bathed frequently in hot water and ashes.

Nov. 16, 9 A. M. The third pill produced the twitching. This so much alarmed the family, that they have discontinued them since. I immediately ordered them to be given again. They produced the twitching in about ten minutes, it lasting sometimes as long as half an hour.

4, P. M. Patient some better, still slight spasm.

Nov. 17. Has had no spasm since yesterday : the swelling in the hand and arm is much reduced : still painful. Ordered a pill every four hours, and a poultice to the hand.

Nov. 18. The patient slept well last night for the first time since she has been unwell. Jaws relaxed. One pill every six hours.

Nov. 19. Patient about the house as usual. Arm stiff. Ordered two pills per day.

Nov. 21. Each pill produces the twitching ; but as the patient has completely recovered, I ordered them discontinued.

The hand now did well, and healed rapidly.

CASE IV.—May 9, 1846, 8 o'clock, P. M. Thomas Brown, of Hoboken, New Jersey, called at my office, and requested me to visit his sister-in-law, Miss Jane Savage, aged 16 years, then at his house, suffering with lock-jaw. On my arrival at his house, I learned that Dr. Julien had been in attendance. I at once had him sent for, and upon his arrival we visited the patient. Upon our entering the room she was thrown into a violent spasm, which lasted about a minute, during which her body was bent backward, resting upon her head and heels, her countenance distorted, and her pulse quick and irregular. After the spasm passed off, we found her jaws were entirely closed and set : pain along the spine, and over the region of the diaphragm : difficulty of deglutition and respiration, and her pulse still quick. Learned the following history : Some days since she ran a carpet-tack into her right thumb ; soon after she took a cold in it while washing. It commenced swelling and to be painful. It grew worse until about forty-eight hours since, when she was seized with the tetanic spasm. Dr. Julien was then sent for : he bled her, and ordered counter-irritation to the spine. This morning she was worse, the spasm more frequent and severe. He ordered an injection, and invited Dr. Hosack to see her. They visited her at 12 M., and at once ordered her to take large quantities of Sherry wine and arrow-root, and a poultice of herbs to the spine, but as she has a very regular set of teeth, and her jaws being set, and as it is very difficult for her to swallow, it was almost impossible to give it, up to the present time, and about nine o'clock P. M., her mother informs me that she has taken about a wine-glassful of the wine and arrow-root. The patient is evidently growing worse. I informed Dr. Julien of the result of the three preceding cases, and advised the use of the strychnine in this. After due consideration *he* wrote as follows : *R Strychnin. gr. j., Spts. Vin. Rectif. ʒj. M. :—Of this 30 drops to be given every two hours. The strychnine was procured and the first dose given, at half-past ten, P. M. In about fifteen minutes the twitching commenced : it lasted about twenty : the patient then fell asleep. At half-past twelve she took the second dose, with about the same effect, again falling asleep. She continued to take the drops every two hours, until twelve o'clock M., Sunday.*

Sunday, May 10. The patient, at eight o'clock this morning, sat up in the bed and fed herself with a tea-spoon, her jaws having re-

laxed very much, and the spasms almost ceased. A 12 M., Drs. Julien and Hosack called, and from some cause, carried the strychnine away with them, giving as a reason to the family that it would injure her health ever after, if she continued to take it. They then ordered her (now she could swallow) to take a gallon of Sherry wine a day; and said she would certainly recover. At 9 P. M., Mr. Brown called at my office, and communicated the above to me; he also said Jane had eaten a piece of beef-steak just before he left home. He asked me to give him a prescription for another bottle of the strychnine, as he was satisfied it had produced the great change in the patient. I did so, with directions to give it as before, *if there was a return of the spasms*. But as they did not return, the drops were not given.

Dr. Julien continued to visit the patient, and ordered the wine to be given in large quantities for some days.

May 16. I visited Miss S. to-day, and found her in a state of intoxication. I at once advised the wine to be discontinued.

June 10. Mrs. Savage and her daughter Jane called at my office to-day. Jane is in a complete state of fatuity. Dr. Julien has been treating her for some days without any benefit. Mrs. S. now wished me to prescribe for this difficulty. I, with the advice of Professor Mott, put her upon a course of Sub. Mur. Hydrarg., and applied counter-irritation to the back of the neck. This course was pursued until it produced gentle ptyalism: this was kept up for about two weeks, with decided improvement.

June 28th. Mrs. S. and daughter called to-day. Jane has entirely recovered. She continued perfectly well, and was married September 20, 1846.

This was undoubtedly a case of traumatic tetanus from a punctured wound, yielding at once to the strychnine; but whether the wine or the strychnine produced the fatuity, I leave for others to decide. Why Dr. Julien carried away the strychnine (without consulting me) while the patient was improving under its use, I also leave.

CASE V.—May 10, 1846. Visited Mrs. Andrews, of Robinson street, aged 55, under the care of Dr. Condit. Dr. Conger, Sen., having been called in consultation yesterday, found her suffering with completely developed tetanic spasms, occurring every few minutes, during which her body was bent backward, countenance distorted, violent contractions of the diaphragm, and jaws set during the remissions, her jaws were nearly closed, deglutition very painful and invariably exciting a spasm, pain and rigidity of the right temporal and masseter muscles: the head was drawn to the right side, and the right arm and shoulder painful, the glands in the right axilla swollen and tender. The patient, some time since, bruised her right elbow, but the pain ceased in a day or two and was forgotten. A few days since the right elbow and arm commenced to be painful, the pain extending up to the shoulder and side of the neck. She thought she had taken cold, and did not feel alarmed until the spasm commenced.



This patient had been bled, and had taken tincture opii, &c., &c. She however continued to grow worse to the present time. I suggested to the above named gentlemen the use of the strychnine. They at once gave their assent, and it was given in doses of one-twelfth of a grain every two hours. It produced its peculiar effect after each dose. She was also ordered injections from time to time, as her bowels would not move without it. On the next day the dose was somewhat diminished, as its effects were very powerful. The spasms ceased after the fourth day. This patient convalesced very slowly, her arm being weak and painful for some time: this, however, may have depended upon her age.

August 21. Called and found Mrs. A. had just returned from the country; she has quite recovered. I have called several times since, and she continues quite well.

CASE VI.—This case occurred in the practice of a gentleman in Sullivan Co., N. Y., and as he has kindly furnished me with a history of it, I will insert it here.

"Dear Sir:—Miss —, of this village, aged 14 years, robust and healthy, ran a piece of bone in the sole of her foot, about the last of October. There was a little irritation about the foot for three or four weeks after the reception of the injury, and two or three times during the period there was slight ulceration; but little pain was felt by the patient until about the time she was attacked by the tetanic symptoms.

"She had, however, from time to time, after the injury and previous to the tetanic attack, more or less 'stiffness and numbness' in the injured leg. She states, also, that at different times during this period, 'her leg was hot and had red streaks upon it;' these lasted a day or two and then disappeared. She had nothing but some slight domestic remedies applied, until her case became alarming by the spasmodic action.

"It had been my determination ever since reading the result of your cases published in the 'Reporter,' if called to a case of tetanus, to treat it with strychnine. When my attention was called to this case, I was destitute of this medicine, and none could be obtained in the vicinity; accordingly the case progressed for forty-eight hours before the remedy was obtained and administered.

"In the meantime, I pursued the following course: There were violent pain and spasms at intervals, commencing in the affected leg, and extending along the muscles on either side of the spine to the head and jaws, violent distress about the diaphragm, with considerable sympathetic fever.

"My first effort towards subduing the disease was making an incision with a bistoury, about an inch and a half in length, and of sufficient depth to thoroughly divide the plantar aponeurosis, which was wounded by the piece of bone. I then filled the incision with lint saturated with ol. terebinth. and a bread and milk poultice to be applied over it. I then used V. S.  $\mathfrak{zxxvj}$ . on the leg, and administered

the following: R Calomel, grs. xx., Jalap, xv., to be followed by sal. Epsom in two hours. After this had operated briskly and freely, I gave her a teaspoonful of Tinct. Opii every hour, with a view to subdue the spasms. After she had taken two or three doses, the spasms were somewhat relieved and the pain less. This truce lasted four or five hours. She became worse, although the Tinct. Opii was continued as above; her body curved more backwards, her joints were set and the spasms more severe. The dose of Tinct. Opii was increased, but it failed to subdue the disease. By this time, I obtained the strychnine, and administered it with complete success; so soon as it produced its peculiar twitching effect, the spasm abated and the patient rapidly recovered: in a few days she was about as usual. The dose given was  $\frac{1}{12}$  of a grain every two hours, at first, gradually increasing the intervals.

"Dear Sir:—I send you above a history of a case of traumatic tetanus I lately treated with strychnine. You are at liberty to make what use you please of it.

"In great haste, yours, &c.,

"To J. Weldon Fell, M. D. (signed) CLEMENT BOTSFORD.

"*Bloomington, Sullivan Co., N. Y.*"

CASE VII.—This case was furnished me by my friend, Dr. E. Vanderpool, and although it was not so well marked as some, still I think that there can be no doubt of its having been an incipient case of traumatic tetanus.

"DR. FELL:

"Dear Sir:—The case of tetanic rigidity you request a history of, though only partially developed, is, I think, sufficiently interesting to be published, as tending to commend the use of strychnine in this most alarming malady.

"The 2d of Sept., 1846, I excised an elliptical piece of the cutis, on the radial side of the metacarpal joint of the thumb of Mrs. —, in view of removing a cicatrix from the point of a scissors with which it had been punctured some three months previously, in hope of curing a neuralgic condition of the arm, which had been thus produced.

"On the 10th Sept., 1846, just eight days after the operation, the wound having healed, a slight but permanent contraction of the arm was noticed, with rigidity of the flexor muscles, particularly the biceps, which was painful upon pressure. That night she was unable to sleep, from the uneasiness and increase of this rigidity involving the muscles of the neck and jaws, accompanied by a 'violent cramp or drawing' in the region of the diaphragm on the affected side. These symptoms all became aggravated by attempting to extend the arm, or by any motion of the body, and produced great general distress, with nervous tremors, 'shuddering and shaking' of the whole body.

"The arm fell on the inner side, as she expressed it, corded in its whole length. Next day there was a little abatement of the above symptoms, but on the 12th she became decidedly worse, the 'cramp and drawings' being more severe.

"Sept. 13th. I was sent for at 3, P. M. I found her sitting up ; said she could not sleep on account of general uneasiness and a disposition to move the arm, which brought on an increase of the symptoms enumerated. On examining the arm, I found it a little, but firmly flexed; the biceps was contracted, cord-like, and hardened, and somewhat tender upon pressure. Slight rigidity of the muscles of the neck on the affected side, also a feeling of 'tightness' extending from her hand to her head. From the tetanic character of the symptoms, I at once prescribed strychnine in doses of  $\frac{1}{10}$  of a grain, in solution, every two hours (when awake) with a sinapism to the biceps.

"Sept. 14, 10 A. M. Patient has slept well through the night for the first in some time, arm a little relaxed, otherwise as yesterday ; continued the strychnine as above.

"7, P. M. No improvement ; ordered  $\frac{1}{4}$  of a grain of the strychnine.

"Sept. 15, 10, A. M. Patient has slept but little during the night ; complains of the 'rigidity, tightness, and drawing' of her arm ; her head is drawn down towards the shoulder of the affected side, with inability to extend the jaws to the full extent, and distress over the diaphragm ; ordered her to take strychnine  $\frac{1}{2}$  of a grain every two hours.

"7, P. M. Has had a few twitches, characteristic of the effects of the strychnine ; a little yielding of the tetanic symptoms ; continued the strychnine as above.

"Sept. 16, 10, A. M. Patient has slept well, general improvement, contracted muscles relaxing ; has taken considerable nourishment, having been unable to do so for some days.

"17. Discontinued the strychnine, as the tetanic symptoms have all disappeared.

"From this time forward, the patient continued to mend rapidly, and by the 21st was perfectly well.

"Respectfully yours, &c.

New York, Oct. 1, 1846.

"EDW. VANDERPOOL."

---

### *Insensibility during Surgical Operations produced by Inhalation.*

In a recent No. of the Boston Medical and Surgical Journal, (Nov. 18th, 1846,) Dr. H. J. Bigelow drew the attention of the profession to the fact, that the leading surgeons connected with the Massachusetts General Hospital, had operated upon a few patients while in a state of insensibility produced by inhaling a *new gas*, said to be discovered, or invented, by Dr. Charles T. Jackson, a chemist, and Dr. Morton, a dentist of Boston. On the reception of this intel-



ligence here, a letter was addressed to Dr. Smith, editor of the above journal, offering to test the article before the profession and medical class of this city, upon patients in the Augusta Hospital. The following is the reply :

“ *Boston, Dec. 2, 1846.*

Dr. PAUL F. EVE :

*Dear Sir*—Dr. J. V. C. Smith has kindly shown to Dr. W. T. G. Morton, of this city, your letter of Nov. 23. It will afford Dr. Morton much pleasure to permit you to make trial of his discovery. He has written a letter to Dr. John C. Warren, of this city, requesting him to name the most *respectable and charitable* hospitals of the United States, and it is Dr. M.'s intention to give to such the *free use of his discovery for the benefit of the poor*. As soon as measures can be taken, such hospitals will be licensed. In order to use the article employed, it is necessary to have a proper apparatus which costs, with a quart bottle of the preparation, \$25. If the hospital you mention desires such, and will render the above amount in a letter, it can have it to use for the poor, and you can employ it, to test the same to your satisfaction. We hope soon to effect arrangements whereby all the surgeons can avail themselves of its use. The discovery is of great value to the world. If you desire to use the same in your practice, I have no doubt Dr. Morton will give you an apparatus and license to do so for five years, for \$100.

Yours, respectfully,

R. H. EDDY,  
*Attorney for Dr. Morton.*”

---

*Surgical Operations with the aid of the “New Gas.”*

To the Editor of the Boston Medical and Surgical Journal :

DEAR SIR—The two following cases, occurring in my practice during the past week, are of interest as supporting the claims to confidence of Dr. Morton's anodyne compound.

CASE I.—Nov. 19th. An Irish girl, under 20 years of age, in attempting to step into the cars at Hamilton, while they were in motion, fell, with her arm upon the track, and had a compound, comminuted fracture at the elbow, from the wheel of the car. At about 9 in the evening, I amputated in the middle of the humerus. The operation lasted a little longer than if done by daylight, although it was a flap operation and quickly executed. Three vessels were tied. Dr. Fisk, dentist, of this city, accompanied me and caused the patient to inhale the vapor of the compound, about three minutes before the operation commenced. By this time she appeared to have yielded entirely to its influence, and became pale, silent, and perfectly passive and manageable, whereas she had before exhibited evidence of great physical suffering and uncontrollable grief. Before the arteries were all tied she appeared to be returning to consciousness, when, on offering the apparatus to her mouth, she seized it with avidity, respired rapidly,

and soon seemed to relapse into the unconscious state. It was thus renewed four or five times before she was placed in bed. Her own statement is that she suffered no pain during the operation, that she was asleep, and when she awoke she breathed again of what was offered to her and fell asleep again—that she remembers to have done this three times. She says she did not know what we were doing to her, but in her sleep she thought she had got a reaping hook in her arm, and that she heard the noise of sawing wood. She says she was not sensible of any thing till she was laid in bed, when she became quite talkative, and evidently somewhat excited. She slept some hours during the night. On dressing the stump on the third day, she made a violent outcry at the slightest pain. I was convinced that her statements with regard to her freedom from pain during the operation, were to be believed.

II.—Nov. 21st. An intelligent tanner, about 30 years old, had, with a fracture of both bones in the middle of the left leg, his ankle crushed by the cars engaged in building the Salem and Methuen Railroad. I amputated the leg just below the knee. The patient respired the vapor under Dr. Fisk's directions. He says he was not conscious of feeling any pain—and after the operation was finished and the ligatures applied, his consciousness returned, and, with great apparent sincerity, he asked *if his limb was taken off*. He says, though he felt no pain, he was conscious of the presence of those around him, and he was obedient to the directions given him. The operation was performed at about 3, P. M., and the stump was dressed at about 9, when, he says, the pain of a few sutures far exceeded that of the operation.

In both these cases the pulse became somewhat accelerated after the operation, the countenance assumed a vacant expression, although in the first case there was working of the brows, and the pupils were dilated. They both appear to be doing well, and exhibit no symptoms worthy of note.

Respectfully, yours,

Salem, Nov. 24th, 1846.

A. L. PEIRSON.

*Postscript.*—November 25th, 1846. Yesterday, I made further trial of the ethereal vapor, upon a middle-aged female, from whom I removed an adipose tumor, by an incision four inches long over the clavicle and scapula. She was an unimpressible subject, and was less perfectly under the influence of the vapor than the others, but she was entirely bewildered and not able to realize the nature of what we were doing to her. She was much more quiet than patients usually are, although the dissection was somewhat protracted, by the dipping down of the tumor into the supra spinal fossa of the clavicle, and confinement by fascia. She says she felt no pain, and did not evince any perception of the puncture of the needle in dressing the wound—a sensation which usually calls forth complaint, as it is commonly unexpected.

It needs, no doubt, still further careful observation of its effects, to

establish medical confidence in the new remedy, a confidence which must be of slow growth. From the results I have seen at the Massachusetts General Hospital, and in my own practice, I am led to expect the following advantages from its exhibition:

1st. Uniformity of its effects, unlike any mode of intoxication by stimulants in the stomach, or respiration of nitrous-oxide gas. My three patients were as unlike in age, temperament and habits, as could well be imagined, yet all exhibited the same appearance of passive endurance.

2d. There was no instinctive or voluntary resistance, which is so embarrassing to an operator. This, next to its power of preventing the perception of pain, is the greatest merit claimed for it.

3d. The securing the patient from the severity of the great shock which a capital operation inflicts on the sufferer. It was quite noticeable, in all the patients I have seen, that there was none of that extreme depression which sometimes follows a severely painful impression on the nervous system.

4th. Its effects pass off rapidly, and, as far as I know, no bad results follow.

5th. It can be repeated several times during the operation, except the mouth or jaws are the parts to be operated on. The repetition of the dose is always sought by the patients with avidity.

6th. The last and most important of its effects, is, that it either wholly annuls pain, or destroys the consciousness of it, so that it is not remembered; and thus the sentiment of fear is wholly obliterated. The patient appears to have been dreaming, and in the second case said that "he was in a distinct existence" (i. e., distinct from his former experience), thus illustrating the theory of double consciousness.

These are recommendations enough to ensure it a fair trial among the humane and enlightened members of our profession, and for their decision we must wait, and by it be governed in its future use. Dr. Morton and Dr. Jackson, at least, are entitled to the hearty thanks of the profession for their discovery, and the liberal manner in which they have offered it to all the subjects of surgical operations, both in and out of the Hospital. If some hunter up of obsolete theories should prove that such a thing had before been thought of, or tried, still these gentlemen are entitled to the credit of having made it, for the first time, perfectly available to the suffering, and submitted it to the test of those competent to decide on its merits, without being content to rest its pretensions on non-professional credulity or popular notoriety.

A. L. PEIRSON.

*Salem, Nov. 26th, 1846.*

---

*The Inhalation of an Ethereal Vapor to prevent sensibility to pain during Surgical Operations.*

To the Editor of the Boston Medical and Surgical Journal:

SIR,—That which has always been a desideratum in surgery, seems, at length, to have been discovered. And if the effects of the



agent or agents be such as has been reported, of which there is little room to doubt since the appearance of the article in a late No. of your Journal, by Dr. Bigelow, Jr., every one who has any sympathy for human suffering must rejoice in the discovery; and all who are called upon professionally to perform painful operations must feel desirous to avail themselves of the means of diminishing or destroying that state of consciousness which recognizes all violence done to the sensitive tissues of the body, while such operations are in process.

But it appears, from numerous statements, and through your correspondent, Dr. B., who speaks with much authority on the subject, that the article used is a secret, or patented affair.

Now the enlightened and regular medical faculty of Massachusetts (as well as of other parts of our country), are associated and have arrayed themselves against all secret remedies, or patent medicines, and this for the just and laudable purpose of protecting the community, as far as might be, from imposition, and of preserving the integrity and standing of the profession; they cannot, therefore, feel themselves at liberty, as I judge, to seek aid for their patients through the adoption of such articles and means.

If I wish to furnish those by whom I am called upon to operate in painful cases with the relief which this new discovery may afford, I am told I must obtain it and use it as a secret, or purchase the patented article and employ it as such. But I ask why? It is said to be, by those who really do, or who assume to know what it is, the vapor of sulphuric ether only. This was judged to be the agent by several who witnessed some of its earliest public exhibitions under the hands of Mr. W. T. G. Morton. Dr. E. R. Smilie, of this city, with all due candor and liberality, has given, in your Journal for Oct. 28th, an account of his experience with sulphuric ether and opium, the effects of which he says are similar to those produced by the "*new gas*."

The free use of the article has been ceded to the surgeons of the Massachusetts General Hospital, and these gentlemen would receive it or adopt its use, on no other condition, of course, than that of knowing what it was, and having the full and free control of it for that institution. Hence, I ask, why, if I wish to avail myself of any of the possible effects of an article of our materia medica—an article which I have administered to patients hundreds of times, which I have often swallowed, and have inhaled till I was all but lost in sleep—why I must now purchase the right to use it, and use it as a patent medicine.

But we are still told that *it is patented*. What is patented? A power? A principle? A natural effect? The operation of a well-known medicinal agent? I doubt the validity of such letters patent. It would seem to me like *patent sun-light* or *patent moon-shine*.

To my mind it seems unfortunate, to say the least, that the discovery has not been brought to public notice in a different manner and under different circumstances. And I am sorry that Dr. Bige-

low, in his article above mentioned, has attempted to apologize for the arrangements which he says have been made by Dr. C. T. Jackson as one of the parties, to secure by patent the control of a medicinal agent like the one in question. The doctor seems to feel very fully his position in relation to this point, when he says,

“For various reasons, discoveries in high science have been usually rewarded, indirectly by fame, honor, position, and occasionally, in other countries, by funds appropriated for the purpose. Discoveries in medical science, whose domain approaches so nearly that of philanthropy, have been generally ranked with them; and many will assent with reluctance to the propriety of restricting by letters patent the use of an agent capable of mitigating human suffering.”

Of the three reasons which he offers as worthy of consideration in this behalf, two are, to my mind, entirely without force sufficient to be any excuse for such a measure; and the total incorrectness of the main part of the third, must be apparent to all who are at all acquainted with the subjects on which it is made to bear.

“1st. It is capable of abuse, and can readily be applied to nefarious ends.”

If, however, the right is to be sold, and every opportunity is to be improved to *make money* of it, and all may buy who please, I do not see how the abuses to which it may possibly be put by evil-minded persons are to be restricted by a patent. And any one vile enough to use such an agent for nefarious purposes, would not stop to ask about his *right* to do so.

“2d. Its action is not yet thoroughly understood, and its use should be restricted to responsible persons.”

Who are the most responsible persons to be trusted with this agent? All will assent, no doubt, that they are such as are most likely to be acquainted with the properties of the article, with the nature of those unpleasant symptoms which *may* occur from the use of it, and have occurred in certain constitutions, and with such antidotes or remedies as should be used if required; or, in three words, regular physicians, surgeons and dentists. And I am at a loss to see why the use of the discovery would not be as safe in such hands as in those of “*the proprietor*” so called.

“3d. One of its greatest fields is the mechanical art of dentistry, many of whose processes are by convention, secret, or protected by patent rights.”

Who is there that bestows a thought on the subject, who will not see at once, that this narcotizing process of inhaling the ether has nothing to do with the *mechanical* operations of dentistry, but only with those which are strictly surgical, those which Dr. B., in speaking of the importance of this process, couples with *amputations*.

As to that part of this third apology, which charges dentistry or its professors with holding secrets, by convention, or by the security of patent, I must view the writer as being entirely in error; for if there is truth in the charge, I cannot find it. I do not know of anything

which is practised in dentistry, in our own country, even relating to the mechanical department, which is kept secret by or from the duly educated dentists. [How this is with the host of ignorant pretenders, and advertising imposters, I know not.] And with regard to a patent for any process in the art, or even for an instrument, I do not know that such a thing exists, nor am I willing to believe, without greater evidence than the doctor's assertion, that a patent can be found that has any especial bearing on the subject of dentistry.

I have been asked, by a member of the Massachusetts Medical Society—a respectable and excellent dentist of this city, what I intended to do about using the “new gas,” stating that he had used it and knew what it was, and when questioned by me directly, did not hesitate to say, “it is simply sulphuric ether”; but added, “the discovery is patented.” My reply to him was, “I shall not obtain and use it as a *secret medicine*—I shall not purchase and use it as a *patent medicine*. If it is simple sulphuric ether, and it will produce the desired effect, I shall use it, and so will others who wish to do so.” If it is a compound, as still advertised to be by Mr. Morton, it is said to be ceded to the surgeons of the Massachusetts General Hospital. These gentlemen, it is to be presumed, will not consent to hold it as a secret or patent medicine; and if known to the medical students who are privileged to attend that institution for the purpose of acquiring information and obtaining instruction in all that is done there pertaining to their profession, no one, as I judge, can rightfully restrict them from using what is there used for the relief of suffering humanity; and it will become, as it ought to be, free to all who should be trusted to do good with it, or who can receive relief from suffering by it. To patent it would be, what it would have been for the immortal philanthropist Jenner to have patented vaccination.

These, Mr. Editor, are some of my thoughts on the subject; and if I am in error for holding them, or for thus giving them to the public, you are able, no doubt, and will be ready, to set me right.

J. F. FLAGG.

No. 31 Winter street, Boston, Nov. 23d, 1846.

---

*Observations on Croup: a paper read before the Fellows of the College of Physicians and Surgeons.* By ALEXANDER H. STEVENS, M. D., President of the College.—(The Annalist.)

The frequent occurrence of croup, and its not unfrequent fatality in the northern and maritime regions, especially those of the United States, render important every addition to our knowledge of the nature and treatment of this formidable disease. Up to the time of Dr. Bayley, of New York, no modern writer appears to have entertained correct pathological notions of this malady. It had previously been confounded with anginous affections of the fauces. It was, however,



known to Hippocrates, who describes it in these remarkable words:—*“Ab angina homo suffocatur oculi affecti sunt, ac velut strangulatis prominent; facies et fauces incenduntur, imo etiam collum intumescitur vero nihil mali habere videtur.”*

We owe to the late Dr. Hosack of this city, the best description of the various stages of croup, and, probably, the best practical directions for the treatment of it. Yet there are important points, both of pathology and practice, which he leaves wholly untouched; and others in which, if I am not mistaken, he is inaccurate.

It is usual among the medical men of this city, to speak of genuine croup, meaning that in which a membrane is formed in the trachea and of spasmodic croup, many of them believing that inflammation either does not exist at all in the latter species, or that it is not the prior or primary morbid condition. These views I hold to be erroneous; and, if carried out in practice, highly dangerous.

Professor Ware, of Boston, (the most recent writer on croup,) has recently presented another view of the subject, in a well-reasoned paper, wherein he records numerous cases and dissections, knowing how little that is truly valuable to American physicians, in relation to croup, is to be found in European publications, more especially among the continental writers; or, rather, how far they fall short in establishing those rules of practice, by which alone the American physician can successfully contend with the formidable malady. I am led to infer that it may present itself under different aspects in different regions. Be this as it may, the division of croup proposed by Professor Ware into four species—viz., catarrhal, membranous, inflammatory and spasmodic, does not accord with my own experience, or with that of the most sagacious and experienced practitioners of this city, with whom I have conversed on this subject.

The forms under which croup has presented itself to my observation in this city, during a period of more than thirty years, are the following:—

1. A child with coryza and occasional cough of the ordinary character, as in bronchitis, is playing about without sore throat, or redness of the fauces, or glandular swelling. He appears more than usually animated—his countenance, especially his eye, is unusually bright, and his mind exhilarated. His skin, at this time, is not heated during the day, but rather harsh to the feel and dryer than natural. To an acute observer, with a nice ear, his voice will be a little sharper than usual; and if he cries for a time, the peculiar inspiration will excite alarm. On the second or third night the attack of croup commonly comes on, after a few hours sleep, the symptoms being a ringing cough, hoarse inspiration and great roughness of the voice. If the patient dies, a membranous formation is found in the trachea, and, more or less, in the bronchial tubes. This is what all admit to be genuine inflammatory croup.

2. Without any noticeable illness whatever, a child suddenly wakes up in the night with spasmodic suffocating cough, of the peculiar

croupy sound, the same inspiration as in the former case and the same hoarseness. A drink of some kind is given : the next cough is less sonorous, but the croupy symptoms as before described remain. The case is usually relieved by an emetic and some stimulating application to the throat, both of which are kept for that purpose in almost every well regulated family in the city, where there are many children under eight years of age. If not so relieved, the patient may die within twenty-four hours or less, or after a lapse of two or three days, or even a week. Where the disease terminates quickly in death, no well-formed false membrane is seen, but only mucus in the trachea, more or less thick, and redness about the glottis. This is the form to which the term spasmodic croup has been given. Spasm of what? Of the glottis, undoubtedly! And from what cause? From the presence of vitiated secretions and undigested decomposed food in the stomach, it is answered. And how does this act? By sympathy? Now, this cannot be either proved, or even rendered probable. It is true, when the stomach empties itself by vomiting, the symptoms, for a time, at least, and often permanently, are relieved. But vomiting does more than unload the stomach: it relaxes the system, reduces the action of the heart, determines the fluids to the skin, which possesses so remarkable an antagonism to the mucous surfaces: above all, it induces a copious secretion from the fauces, and thereby unloads the congested vessels of the glottis. It is admitted, that an acid state of the stomach often causes irritation in the pharynx, which thence extends to the posterior part of the upper portion of the larynx. In adults this is beyond all doubt, and in children it is every way probable. Is the impression of these acrid matters, eructated from the stomach or secreted in the pharynx under particular circumstances, upon the larynx the cause of the sudden occurrence of croup? It would be difficult absolutely to disprove these propositions. In my mind they are not improbable; but, on the other hand, admitting the connection between disordered stomach and croup (established, as it is, by the most extended observation), may it not be attributable, in part, at least, to the fact that continued coldness of the surface is precisely the condition which fits the system, as well in childhood as in age, for the action of cold and moisture in producing inflammatory diseases?

But, setting aside these considerations, and, under any view of the subject, what is the morbid condition of the glottis, which gives rise to the croupy symptoms? If from cold, it is inflammation; if from acrid secretions acting for more than a few minutes, it is, and can be, nothing else. There is, therefore, no spasmodic croup, if, by spasm, it is intended to exclude inflammation as a cause of that spasm.

But, I am asked again, how are the two kinds of croup above described, to be explained pathologically. The answer to this query will appear in the classification of the forms of croup now proposed.

Under the term croup, properly so called, are included two affections, which may exist either separately or together.

1. The *cynanche trachealis*, or trachitis, in which membranous exudation is more or less formed in the trachea, before any affection of the larynx, and, more especially of the glottis, takes place.

2. The *cynanche laryngea*, or laryngitis, or glottitis, in which the laryngeal, or spasmodic symptoms occur first or exteriorly.

3. Between these two, there are varieties of combination, and these constitute the great majority of the cases met with in actual practice. In the most pure case of the so-called spasmodic croup, no practitioner can say beforehand that no fatal inflammation of the glottis will occur, or that no obstruction of the trachea, by false membrane, or solid mucus, is to be apprehended.

Is the disease, croup, a specific disease? Is there any peculiarity in the inflammation which gives rise to that secretion in the trachea? Let us look to anatomy and physiology, and the observation of disease, and to dissections, for answers to this question.

In the first place, between the most firm tubular form of false membrane and inspissated mucus, and mucus of an ordinary consistence, we see, in dissection of croup, every grade and variety. If specific, its character should be more marked.

When a child attempts to swallow hot water, the membranous exudation is produced in the posterior fauces and upper part of the larynx. Here, then, is an ordinary cause of inflammation producing what some consider a peculiar and specific secretion.

This question has a bearing upon practice, because it is contended by some that the specific effect of mercury is the proper remedy for this specific secretion.

It remains for those who deny the specific character of the tracheal secretion, to account for its existence there, rather than in the larynx and trachea. In the larynx it is more rarely met with; in the trachea it gradually becomes less tenacious, and more resembles ordinary or inspissated mucus. May it not be merely inspissated mucus in all cases? mucus, inspissated by rapid desiccation? If a portion of mucus is left in the trachea, the increased rapidity of respiration, and the narrowed calibre of the tube, must necessarily remove its watery particles in a doubly augmented ratio; less so in the trachea, because the same volume of air in proportion to surface does not pass by, and the air, also, is more charged with the moisture, in its previous passage through the trachea—less so in the larynx, because that tube is larger. Rarely is the membrane seen upon the glottis, because death arises from spasms, ere it has time to form on that irritable part. Rarely in adults, because in them the trachea is double the size it is even in advanced childhood, and because they exert a stronger volition to detach by hawking the first tenacious mucus that is adherent to the trachea.

The surface of the trachea is very unirritable. Where foreign bodies enter by accident, as when a tube is forced into it from an artificial opening, no coughing is induced, unless, by its rising up, the glottis is touched. A small foreign body has been known to remain



for years quietly lodged in one of the ventricles of the larynx. The trachea, and the comparatively unirritable parts, are those in which inflammation may be going on for a considerable length of time, without exciting any very marked symptoms. This constitutes the true explanation of the two modes of invasion in croup.

Besides these three forms of idiopathic, primary, or true croup—the laryngeal, the tracheal and the mixed—there are forms of secondary croup, such as occur in measles, scarlet fever, and, more especially, in the malignant ulcerated sore throat, the diphtherite of Bretonneau. This last occasionally occurs sporadically with us, and is, I apprehend, very generally, the disease, which, under the term croup, carries off, in quick succession, two or more children in the same family. I have treated it successfully with calomel and opium, followed by wine whey, in conjunction with nitrate of silver, to the throat—but my experience is too limited, for me to assume to instruct others in regard to its nature and treatment. The French writers do not appear to discriminate between this affection and croup, as known here and in Great Britain.

Before speaking of the proper medical treatment, I will say a few words on a point of Hygeine.

1st. What is the best method of bringing up children, with a view to their exemption from this disease?

Two systems are adopted for this purpose—one is to allow free exposure and exercise in the open air, except in the very worst weather. The children, being well guarded with warm clothing, are not suffered to cease their exercise until they re-enter the house. The second is to confine them within doors, during the whole of the winter and the early part of the spring. My observation leads me to think that, although the first plan, if it is followed with great care, is the best, yet the second is more easily pursued, and, upon the whole, is the safest.

2d. Under what circumstances should especial precautions be taken, with a view to ward off the attack?

A child, between the ages of two and five years, with catarrh and cough, however slight and unfrequent, is a fit subject for croup: and, if that disease is prevailing at the time, an attack, after any exposure to cold and moisture, or any excess in eating, is almost probable. The child should be confined to the house and dieted.

The treatment of croup should be prompt and decided; for, left to itself, the disease would probably, in general, prove fatal. But, although prompt and decided treatment is necessary, it does not follow that the heroic treatment is always, or even generally, required. But the existing symptoms must always be met by remedies adequate to subdue them. The great skill of an experienced practitioner is shown in determining what amount of active treatment is *essential* in any given case; how much is requisite to remove the threatening symptoms, and to induce a favorable change, and how soon he must recur to the more severe remedies, after the disease has been for a time meliorated.

---

*Cancer of the Stomach.* By Professor W. H. H. WALSHE, M. D.  
(British and Foreign Medical Review.)

---

The mortality from cancer of the stomach is very considerable. In this respect it yields to no organ but the uterus. Of the 8289 deaths in Paris, 2303 are referred to the stomach. In 67 cases, MM. Herrick and Popp found this organ diseased in 19. Cancer of the stomach may exist alone, but is usually associated with similar affections of other organs, more especially of the liver. It is almost invariably primary. All the varieties of the three species of carcinoma occur in this organ; it is the special site of colloid cancer; and the milk-like variety of encephaloid is more common here than elsewhere. Infiltration is essentially the mode of deposition in this place, and, indeed, throughout the alimentary canal; and the seat of the deposit is the submucous cellular tissue, though the mucous membrane, particularly when hypertrophied, may become a nidus of formation. The pylorus is the part most commonly affected; next the cardiac orifice; then the greater, and, lastly, the lesser curvature. Dr. Walshe has not met with an instance in which the disease was limited to the fundus—a fact of importance as bearing upon the supposed origin of the disease from the ingestion of irritants. Three-fourths, or even more, of the organ may be disorganized; and this is particularly the case when colloid is the species.

The mucous membrane long resists the disease, and its chief tendency is to become irregularly hypertrophous, giving rise to the apparent formations of vegetations, &c. The cellular structure undergoes very marked thickening, and this occurring between the muscular fibres produces the striated appearance so commonly observed. The muscular coat of the sound parts of the organ is often enormously hypertrophied. The peritoneal coat is seldom affected, excepting in cases of colloid.

The size of the organ varies extremely. When the pylorus is affected it is often greatly enlarged; when the cardiac orifice, it is contracted; when the body of the organ is alone diseased, the general bulk commonly remains unchanged. It is a curious and unexplained fact, that, where the pyloric orifice undergoes dilatation, the walls of the stomach become hypertrophous.

The progress of the disease presents nothing peculiar. Ulceration is slow to commence; but when once begun, its ravages are extensive. In most cases, adhesions, especially to the liver and pancreas, take place before the peritoneum gives way.

The disease is more common in males than in females, and between the ages of 35 and 60. It is often hereditary, and has apparently, in many cases, been induced by mental distress.

Cancer of the stomach, in the early stages especially, may be confounded with other affections; the most practically important of which are *gastrodynia* and *chronic gastritis*. We subjoin the following sketch of the chief points of distinction:

*Gastrodynia.*

Tongue variable, but often pale, and pitted at the edges.

Eructation frequent of air, without disagreeable smell.

Appetite depraved, irregular, capricious.

Sensations, sometimes of heat, sometimes of cold in stomach; thirst not common.

Solids more easily digested than liquids.

Digestion completed, though with much labour and suffering.

Pain variable, occurs in irregular paroxysms; is often relieved by ingestion of food or pressure.

Epigastric pulsation not uncommon.

Never runs a completely latent course.

Chronic vomiting is most frequent in females, and is almost confined to persons affected with hysteria.

Vomiting of coffee-ground-looking matter does not occur, unless from accidental and rare hæmatemesis.

Bowels generally constipated, but not obstinately so.

Febrile action accidental and rare.

In females the chlorotic tint is often present.

Often accompanied with various nervous or hysterical symptoms.

Hypochondria occasionally present.

Is more frequent than the other two.

Is more common in women than men.

May exist in very young persons (e. g. æt. 15.)

*Chronic Gastritis.*

Tongue dry, red, contracted, smooth, shining, or saburral.

Eructation not a prominent symptom.

Sensation of heat in stomach; thirst.

Digestion imperfectly completed.

Epigastric pain not very severe, and scarcely ever felt when the stomach is empty; increased by pressure.

It is not observed.

Never completely latent.

Vomiting of sudden and severe character sometimes the very first symptom; occurs irregularly before or after eating.

Coffee-ground-looking matter sometimes vomited; but this is rare and exceptional.

Irritation, colic, and diarrhœa frequent, from extension of inflammation to intestine.

Evening fever not uncommon.

Violet discoloration of the lips, conjunctivæ, face, &c., often present.

Not so attended.

Hypochondria not caused by chronic gastritis.

Is rarer even than cancer.

Is probably equally frequent in both sexes.

Occurs at all ages.

*Gastric Cancer (early period.)*

Tongue pale or natural.

Eructation of air more or less fetid, sometimes horribly so, a prominent symptom.

Appetite diminished, or even totally suppressed.

These symptoms not observed.

Liquids more easily digested than solids.

Digestion not properly effected.

Epigastric pain may be agonizing; the lancinating character sometimes marked; often increased by pressure.

It is not observed.

May for a variable time be completely latent.

Vomiting of sudden and severe character is never the first symptom; it occurs generally early in the morning, subsequently at variable periods after eating, or at periodical intervals.

The matters vomited are a first glairy, then half-digested food, then coffee-ground or soot-like.

Bowels habitually and obstinately constipated; occasional severe diarrhœa.

Fever absent.

Straw-coloured tinge of skin may be obvious.

Not so attended.

Hypochondria not an effect of gastric cancer. (?)

Is much rarer than gastrodynia.

Occurs more frequently in men than women.

Is excessively rare before æt. 30.



| <i>Gastrodynia.</i>  | <i>Chronic Gastritis.</i>                                  | <i>Gastric Cancer (early period.)</i>               |
|--|--|---|
| Is often hereditary.   | Is not hereditary.   | Occasionally runs in families.                      |
| Is rarely referrible to any distinct local exciting cause.       | Is often referrible to some distinct local exciting cause. | Is rarely, if ever, referrible to local agencies.   |
| Is relieved or cured by stimulant, tonic, and anodyne treatment. | Is relieved or cured by antiphlogistic treatment.          | Is not cured, but is relieved by special treatment. |

As the disease advances the diagnosis becomes less obscure, but cases do now and then occur which present all the ordinary combinations of symptoms, and yet are not cancerous; so that the detection of *tumour* is the only absolutely certain sign. This is most easily discovered when seated in the pylorus or great curvature: it is much more difficult to detect when occupying the lesser curvature or the cardiac orifice. It must be remembered that the situation of the tumour changes continually; and it is of the last importance to bear in mind that the whole course of the disease may be of an intermittent character.

In regard to treatment but little can be said. Conium is the only supposed specific which is applicable. Dr. Walshe has derived benefit from a combination of trisnitrate of bismuth and extracts of hop, stramonium, and conium, in pill; and he believes that the treatment generally should be such as is applied to nervous, rather than inflammatory affections. Leeches and blisters may be used to relieve occasional local irritation. Opium is contraindicated by the constipation; but the Indian hemp may be tried. A drop or two of oil of cajeput on sugar is the safest carminative. Cold applications or a blister sometimes also relieve the flatulence, and a dose of morphia has been found useful in the same way. But most is to be done by regulating the diet, observing what agrees with the patient, making the *quantity* taken at each meal *small*, securing perfect regularity in the hours, and complete mastication of each morsel. Sickness may be relieved by effervescing draughts, prussic acid, blisters, rough ice allowed to melt in the mouth, the application of ice in bladders to the epigastrium, or an occasional dose of creosote. The bowels are best kept open by enemata: drastic purges are quite inadmissible.

M. Recamier narrates a case of pyloric tumour, "possibly cancerous," which was reduced in bulk by pressure, applied by means of a folded napkin secured by a bandage round the body. It may be well to try some such plan as this.

---

*On the Treatment of Orchitis by division of the fibrous tunic of the Testicle.*—[Gazette des Hopitaux, from St. Louis Medical and Surgical Journal.]

M. Vidal de Cassis is a partisan of division of the fibrous tunic of the testis in some forms of orchitis, attended with severe suffering.

The following is a resumé of M. Vidal's opinions, for which we are indebted to his interne, M. Bouteillier.

*Definitions and Complications.*—Parenchymatous orchitis, which may likewise be designated as orchitis properly so called, is inflammation of the testis itself. It exists, according to M. Micard, scarcely ever without affection of the epididymis. This last inflammation precedes orchitis properly so called. In fact, in order to extend itself to the testis, the inflammation must affect the epididymis. Let it be well understood, that we are speaking of affections of the testis consequent on gonorrhœa. In cases following blows on the organ, or of wounds of its structure, the reverse may happen—that is to say, we may meet with parenchymatous orchitis before we have epididymitis. We can easily conceive the existence of the first inflammation in such cases as these, without the coincidence of the second.

Parenchymatous orchitis often accompanies effusion into the tunica vaginalis, the consequence of inflammation; but in *all* these cases we are not to conclude there is inflammation of the serous membrane: we believe the inflammation has more frequently a passive rather than an active character.

Lastly, sometimes we may find in the same person, parenchymatous orchitis, epididymitis, effusion into the tunica vaginalis, inflammation of the subcutaneous cellular tissue, or even of the skin of the scrotum.

*Frequency.*—Orchitis, properly so called, is much more frequent than is generally believed, and merits a description in our nosographical chart. If M. Vidal has observed more than any other surgeon, one ought not to be so much surprised when acquainted with the large number of patients who apply for admission at the Hopital du Midi. Each surgeon can there make his selection. While one receives a large number of patients affected with diseases of the scrotum, in order to confirm his views on those affections, another admits cases which bear most on syphilis. So that it cannot be said that parenchymatous orchitis is only met with in the wards of M. Vidal. One case presented itself in the service of M. Ricord, in the commencement of this year.

*Causes.*—Parenchymatous orchitis, like epididymitis, recognizes as its cause, most frequently, an existing gonorrhœa, or one that has recently disappeared; in fact, it is most frequently gonorrhœal. We have attempted to push our inquiries further, and ascertain why, in certain individuals, gonorrhœa induces the affection of the epididymis, and in others (but much less frequently), orchitis, properly so called. To this end we have most minutely interrogated our patients on the circumstances of the gonorrhœal affection. But we have been unable to find any aggravating cause constant in all.

*Local Symptoms.*—The tumor formed by the inflamed testis is less voluminous than when caused by the epididymis. We have already stated that Dupuytren was wrong, when he advanced an opposite opinion. In the general swelling, the enlarged epididymis forms the larger portion, next the testis—and, lastly, the effusion into the tunica

vaginalis. The form of the partial tumor we are speaking of, is that of the testis, exaggerated, it is true. The inflamed organ presents a swelling in front of the epididymis, behind the serous effusion; neither elasticity nor resistance remains; the swelling is as if containing coagulated fluid. When the tunica vaginalis is emptied, the testis appears to occupy the place of the liquid; and the general swelling, previously pear-shaped, assumes a rounder form. The pain and local heat are of the most violent description. The pain has this peculiarity, that it spreads upwards and downwards, extending to the kidneys, and to a corresponding point below. The color of the skin is slightly modified; but in some cases it is exceedingly red, or even of a violet color. It has been remarked, that the cord is less liable to be affected in cases of parenchymatous orchitis, than in instances of simple epididymitis.

*General Symptoms.*—Fever is generally of the most violent form; there is sleeplessness, nausea, colic; and vomiting comes on, adding considerably to the suffering of the patient, so as to induce him to call for treatment which silences him at once.

*Prognosis.*—The prognosis is not severe, when we destroy that which gives it a particular character—namely, the strangulation; but is very severe, on the contrary, when the disease is allowed to run its own course. In that case, suppuration or mortification speedily comes on in the parenchymatous structure of the testis.

*Treatment.*—Local and general bleeding, poultices made with laudanum, narcotic embrocations, purgatives—lastly, puncture of the tunica vaginalis, produce but slight amelioration of the symptoms of the patient. It is necessary, in many cases, after having recourse to all these remedies, to have recourse to the division of the tunica albuginea, and it is better to perform it early.

This little operation presents nothing very alarming to the patient; hitherto, it has never been followed by an untoward event. Nevertheless, before resorting to it, it may be as well to puncture the tunica vaginalis, when that membrane contains fluid, and, if that allays pain, allow the patient to remain quiet; but we are obliged to admit that temporising in such cases has too much danger to be long excusable. We have always remarked that pain, after the division, ceases immediately; the fever decreases, and the patient falls asleep in a quarter of an hour, although he may have been unable to rest for several days.

After the division of the membrane, no further application is necessary other than a laudanum poultice applied to the scrotum, which should be kept in its place by means of a loose bandage. In the seven cases of division, which we have collected, the cure was rapid; in the instance of the patient operated on by M. Cullerier, the recovery took place in eighteen days; in a case we have seen this year, a cure was effected in ten days, in one instance—in sixteen, in another.

The division of the tunica albuginea should not be more than a centimetre or a centimetre and a half; cicatrisation sometimes takes place by union of the skin, tunica vaginalis, and albuginea, to this



extent; but very often this adherent point—which is in no respect injurious—completely disappears, and the testis recovers its freedom, its ordinary volume, and normal consistence; its functions are subsequently in no respect altered.

---

*Hydropathy, or the Cold Water Cure.*

The following conclusions on this subject, we meet with in Forbes' British and Foreign Review:—

1. We should be glad to see Dr. Currie's practice revived (for the sake of experiment, at least) in all its boldness, for the suppression of the general febrile paroxysm. On carefully looking over the evidence published by Dr. Currie and his contemporaries, it is impossible to deny that they attained a larger amount of success in treating fever by water than other practitioners have done by other means. We have already pointed out how their practice can be misunderstood by modern writers. But, while we regard this practice as well adapted for treating general fever, we find no proof that it is competent to meet the dangerous local complications with which fever is so often accompanied. These complications may reasonably be expected less frequently, when the early treatment of fever is rendered more efficacious. But when they do occur, we find nothing in hydropathic writers to show that lancets, leeches, blisters, &c., can be dispensed with.

2. In a large proportion of cases of gout and rheumatism the water-cure seems to be extremely efficacious. After the evidence in its favour accessible to every body, we think medical men can hardly be justified in omitting—in a certain proportion of cases, at least—a full trial of it. No evidence exists of any special risk from the water-practice in such cases.

3. In that very large class of cases of complex disease, usually known under the name of chronic dyspepsia, in which other modes of treatment have failed or been only partially successful, the practice of Preissnitz is well deserving of trial.

4. In many chronic nervous affections and general debility we should anticipate great benefit from this system.

5. In chronic diarrhœa, dysentery and hemorrhoids, the sitz-bath appears to be frequently an effectual remedy.

6. We find nothing to forbid a cautious use of drugs in combination with hydropathic measures. On the contrary, we are convinced that a judicious combination of the two is the best means of obtaining the full benefit of each. The water cure contains no substitute for the lancet, active purging, and many other means necessary for the relief of sudden and dangerous local maladies. The banishment of drugs from his practice was necessary, and perhaps natural, on the

part of Preissnitz : the like proceeding on the part of qualified medical men superintending water-establishments in this country, evinces ignorance or charlatanry, or both.

7. With careful and discreet management, in the hands of a properly qualified medical practitioner, the water-cure is very rarely attended with danger.

8. Many of the principal advantages of hydropathy may be obtained in a private residence, with the assistance of ordinary moveable baths. Therefore, it can easily be brought under the direction of the regular medical practitioner.

9. In many cases, however, it is evident that what may be termed the mere *accessories* of the water-cure, are of extreme importance in bringing about a favorable result ; and these accessories are frequently not available—or available in a very inferior degree—in ordinary practice. Among the more important of these accessories we may mention the following as having relation to most of the chronic cases treated in hydropathic establishments : 1, relief from mental labours of an exhausting or irritating kind, from the anxieties and responsibilities of business, from domestic irritations of various kinds, from mental inaction or ennui, &c. ; 2, change of locality, air, scene, society, diet, &c. ; 3, the fresh mental stimulus involved in the almost constant occupation of the patient's time, in the performance of the numerous and various dabbings, paddlings, sweatings, washings, drinkings, rubbings, &c., imposed by the water treatment ; 4, the frequent and regular bodily exercise taken in the open air, or within doors ; 5, the powerful mental stimulus supplied by the confidence generally reposed by the patients in the means employed, and by the consequent hope, alacrity, cheerfulness, &c. ; 6, the total abandonment of vinous and other stimulants, and of drugs,—all of which have, in a large proportion of cases, been tried and found, not only useless, but probably, productive of disadvantage.

10. A certain and not inconsiderable portion of the benefits derived from hydropathic establishments are, however, attainable without them, by other means, as by travelling, &c., &c. For example, we suspect that many of the most striking results witnessed in such establishments, as in the case of Sir Edward Bulwer Lytton or Mr. Lane, would have probably been obtained, if the patients had chosen to hire themselves, and had worked as agricultural labourers, in a dry, healthy district, and had lived on agricultural fare, sufficiently nutritious in quantity and kind, for a sufficient length of time.

11. Notwithstanding the success of the founder of hydropathy, its practice by non-professional persons can neither be fully advantageous nor safe. At the same time, it is true that very little experience is necessary to enable an educated medical man to acquire sufficient insight into it for purposes of practice. Many of the best hydropathic physicians have, in the first instance, devoted very few weeks to studying the subject in Germany.

12. Many advantages would result from the subject being taken

up by the medical profession. The evils and dangers of quackery would at once be removed from it. Its real merits would soon be known. The tonic portion of its measures might then be employed in conjunction with special remedies of more activity, which, no doubt, would often prove exceedingly beneficial.

13. The benefits ascribed to hydropathy, but arising indirectly from the abandonment of drugs, vinous and other stimulants, &c., may certainly be obtained without sending patients to Graeffenberg.

14. Finally, it must always be remembered that the distinction between quacks and respectable practitioners is one, not so much of remedies used, as of skill and honesty in using them. Therefore, let our orthodox brethren be especially anxious to establish and to widen, as far as possible, this distinction between themselves and all spurious pretenders. "*Artem medicam denique videmus, si à naturali philosophia destituitur, empiricorum praxi haud multum præstare. Medicina in philosophia non fundata, res infirma est.*"

---

*On the Topical Application of the Sulphate of Quinine.*  
(New-Orleans Med. and Surg. Journal.)

The following correspondence having been submitted to us, we have thought it might be interesting to our readers, and therefore insert it in this place :

To A. J. WEDDERBURN, M. D., *New-Orleans.*

DEAR SIR—Having observed, with much interest, some remarks by you in the last number of the New Orleans Medical and Surgical Journal, on the subject of the treatment of ulcers, with quinine, I take the liberty of suggesting to you, that during the last five years I have frequently treated chronic conjunctivitis and urethritis, by direct applications of quinine dissolved in distilled water—in the latter cases, believing that the inflammation usually extended to the bladder, I have directed the injection to be thrown into it.

I would beg leave to remark also, that for ten or twelve years I have treated chronic ulcers, especially those resulting from burns, with a preparation of quinine, prep. chalk and pulv. rhei, with very marked benefit.

I am, most respectfully, your obedient servant,

RICHARD LEE FEARN, M. D.

*Mobile, Sept. 5th, 1846.*

---

NEW ORLEANS, Sept. 10th, 1846.

DEAR SIR:—In answer to your letter, dated the 5th instant, I have to inform you that I have never used the sulph. quinine, in the treatment of conjunctivitis, or in urethritis, as a local application, but I have frequently noticed from its internal administration the relief afforded, in the course of a few hours, in a case under treatment for



a soft cataract, the person being subject to frequent violent attacks of inflammation of the conjunctiva. In these attacks, I have always used opium with the quinine, when the latter has been given, and I have, at times, used the opium alone, but never with the same effect as when given in combination. I have administered this remedy in cases of urethritis, for chordee, in ten gr. doses at bed time, with marked success, when the same quantity of camphor has failed to give relief.

I cannot doubt, for a moment, the good results that must attend the topical application of quinine in the affections mentioned above. I have often thought of its application in such cases, but have not resorted to the treatment, in consequence of the relief I have always seen follow the use of the nitrate of silver in inflammations of the conjunctiva. If you will refer to the January number of the *New Orleans Journal*, you will find a case reported of a sloughing ulcer from primary syphilis, in which the ulcerative process was immediately arrested by the topical application of quinine, when other remedies had failed.

Erysipelas prevails in the Charity Hospital, during the winter, in the form of an epidemic. During the last winter, after a number of cases in which I had used the knife, were attacked with this disease, I was induced to resort to dressings saturated with a solution of quinine, about 5 grs. to the ounce of water, immediately after an operation, and in no case in which this remedy was used, did the disease occur.

I have lately used an ointment of quinine in a case of *Eczema Capitis*. The excessive inflammation attending the eruption was relieved in a few hours, and the disease entirely subsided in four or five days. The ointment used in this case was composed of sulph. quinine ℥j; laudanum gtt. xv; ol. lavender gtt. iij; simple cerate ℥j. The laudanum was used chiefly with the view of dissolving the quinine.

I shall take the earliest occasion to follow your treatment, and inform you concerning the same.

I am, very respectfully, your obedient servant,

A. J. WEDDERBURN.

To Richard Lee Fearn, M. D., Mobile, Ala.

*Case of Inverted Displacement of the Urinary Bladder.* By J. G. CROSSE, Esq.—(*British and Foreign Review.*)

Mr. Crosse's paper gives the history of a case of rare occurrence, and is important, as exhibiting the value of a careful examination and consequent just diagnosis, and the dreadful risk attending a mistake in this particular. We extract the more material points of the narrative :

"In the year 1829, a highly respected colleague of mine, since

deceased, received under his care a healthy-looking female child, aged between two and three years, on account of a tumour, about the size and shape of a walnut, projecting visibly at the external *labia pudenda*. It was of a florid red colour, and somewhat granulated upon its surface, so as to resemble a large strawberry; and the surgeon entertained a notion that it was a vascular tumour, which might be removed by ligature, on which account he requested me to inspect it.

"After a slight examination, I expressed my doubts as to its being a vascular tumour, and dissuaded him from the hasty application of a ligature. I could not, however, immediately explain its nature, having no conception how such a tumour could be formed by the displacement of parts only, without any superadded morbid growth. Towards the posterior part of the tumour, and on its sacral aspect, there was an aperture, which was conjectured to be the entrance into the displaced urethra. A very small female catheter easily entered this aperture, and passed along a channel a little to the left side of the median line: urine distilled in drops through the catheter, but there was not a gush, although the instrument had entered so far that we concluded it must have reached the cavity of the bladder. Besides what thus oozed through the catheter, slightly tinged with blood, there was an oozing of urine from another source, which was not explained until a second and more strict examination, instituted a few days afterwards, on my casually coming to the patient's bedside, just as the surgeon was prepared to apply a ligature round the neck of the tumour.

"I now found concealed in a fold of the tumour, and near to the posterior junction of the labia, two orifices not far asunder from which the urine oozed, and which were evidently the vesical terminations of the ureters. On pressing the tumour firmly, as if to reduce it like a hernia, I found it yield and pass gradually behind the symphysis pubis, and within the labia; and under a continuance of the taxis it all retired, leaving the external parts in their proper shape and position. A passage remained, through which the tumour on retiring had taken its course, which was actually the dilated urethra, into which I *could* and *did* introduce my little finger, until it fairly entered the cavity of the replaced bladder; for it now became clearly demonstrated that the vascular red tumour, externally presenting itself as first described, was the urinary bladder in its entire thickness, including its mucous, muscular, and peritoneal coats, prolapsed through the dilated urethra, and at the same time inverted or turned inside out. The proper lining membrane of the bladder became, in the progress of this displacement, the external covering of the tumour. As fast as the urine was secreted by the kidneys, it oozed from the terminating orifices of the ureters, which were concealed within a fold of the exposed surface of the tumour, and approximated to each other. The neck, or deepest and narrowest part of the tumour, just concealed within the labia, was covered by the inverted lining of the urethra, the inversion being complete.

"In this instance, had a ligature been efficiently applied to the neck of the tumour, as was contemplated, the bladder would have been removed, including all its coverings, the ureters cut through just above their terminating orifices, and the peritoneal cavity largely opened, with a necessarily fatal result.

"As the friends of the child could not be applied to, the history was imperfect. It was stated that the tumour had existed for a considerable time, and been always attended by stillicidium urinæ; also that it had been once replaced, but descended again, shortly before it came under my observation. During the short period that the child remained under my notice, after the replacement of the bladder, there was no relapse; and since this account was sent to press, I have been fortunate enough to ascertain, and to be enabled to add, that the patient is still living, after an interval of sixteen years, and is a healthy young woman, save only the affliction of the incontinence of urine, with which she has been constantly troubled, but without any relapse of the vesical displacement."

---

*On the Effects of Emetics on Young Subjects.* By JOHN B. BECK, M. D.—(New York Journal of Medicine.)

Dr. Beck remarks that children vomit with greater facility than adults; this he ascribes to the more conical shape of the stomach in children, in consequence of which the contents are more readily forced out. Active and debilitating emetics, the author adds, are often injurious; he alludes especially to the antimonial emetics. In the first place, tartar emetic is a powerful *sedative*, and children do not bear well this class of agents. The following are the author's conclusions:

1. As a general rule we need not be afraid of vomiting the youngest child, provided the means used are mild—such as ipecacuanha, &c. The mere act of vomiting is attended with no danger, while the remedial agency of an emetic is one of great power and value. Besides acting on the stomach, it extends its influence to the mucous membrane lining the pulmonary organs, promoting secretion in the first place, and then aiding in dislodging and ejecting morbid accumulations; accordingly, in pulmonary affections, there is nothing so efficacious.

2. The vomiting induced by the preparations of antimony ought to be resorted to with great caution in very young children, and should never be used except in those cases where a sedative effect is required, and can be borne with safety. Inflammatory excitement ought then always to be present to justify its use in a young child. Where the object is simply to evacuate the stomach, it ought never to be thought of. In such cases as croup and pneumonic inflammation, it may be justifiably and beneficially used. In these cases it will be found, that



the system can bear the sedative influence of the article much better than it can in the ordinary conditions of the system. Even here, however, care should be taken not to push the article too far, as dangerous collapse has been known sometimes to be the result.

3. The *continued use* of Tartar Emetic in young subjects cannot be too specially guarded against. It is in this way, probably, that it is so apt to prove injurious. A single dose, even though it vomits very freely, may be borne with comparative impunity, while the repetition of it may keep up nausea and intestinal irritation, so as to cause injurious prostration. This is very likely to happen in cases of a chronic character, like whooping-cough. Although mild emetics are among our best remedies in this disease, and where the subject is old enough, a single emetic of antimony is frequently exceedingly beneficial, yet the repeated use of antimonial emetics, as is too often the case, appears to me to be a great error in practice. It is not indicated by the nature of the symptoms, and violates a great rule which ought always to be observed in the management of chronic cases, and that is not to break down unnecessarily the strength of the patient.\* Again, in ordinary catarrhal affections in children, a good deal of mischief is frequently done by the continued use of expectorant mixtures containing this active article. The Hive Syrup of Dr. Coxe, which is now in every family, and is given on the slightest occasions to infants, without even consulting a physician, has, I am convinced, done a great deal of harm. I say this without wishing to undervalue this preparation. In proper cases it is really a useful article, but persons out of the profession ought to know that its principal efficacy is owing to the quantity of Tartar Emetic which it contains, and that the indiscriminate use of it in cases where mild articles are required, must be injurious.†

4. As the effect of Tartar Emetic on the system cannot always be measured by its emetic operation, even in the adult, this fact ought to serve as a caution against the too common practice of giving repeated doses of it to produce vomiting in children, when they happen to be narcotized. While it fails to vomit, it may still operate as a poison to the system. In all cases of this kind, the proper method of treatment is, not to push the emetic, but to endeavor to restore the sensibility of the patient, and then sometimes vomiting comes on at once.

5. In using Tartar Emetic in children, especial regard should be

\* Dr. Armstrong says that "it is a most notorious fact, that the whooping-cough is far more fatal in London than in the country; and I believe," he adds, "that this arises from the very free use of antimonial wine in London." Lectures, p. 248.

† Every ounce of Coxe's Hive Syrup contains one grain of Tartar Emetic. My friend Dr. McCready has communicated to me the particulars of a case in which a child between four and five years of age, laboring under whooping-cough, manifestly sunk under the too frequent use of this article. The exhibition of it had been continued about eight days, when symptoms of intestinal irritation came on, accompanied with great general prostration, which in a few days ended the child's existence.

had to their constitutions. In those naturally delicate, and especially where the scrofulous diathesis exists, it should never be used if it can be avoided. Prostration is much more apt to ensue in them, and where the article is persisted in for any length of time, it is sure to do harm. It is in such constitutions, when laboring under hooping-cough, and where the use of this article has been too long continued, that the baneful effects of it are most strikingly observed.

6. It is perhaps hardly necessary to say that if Tartar Emetic be an article of such danger, the younger the subject to whom it is given, the more likely is it to do harm. In children under a year, I should say, as a general rule, it ought never to be used. During that period the powers of life are too feeble to bear so active a remedy, at the same time that all the beneficial effects of an emetic may be gained from the use of ipecacuanha, or even milder means.

---

#### BIBLIOGRAPHICAL NOTICES.

- 
1. *Chemistry of the Four Seasons.* By THOMAS GRIFFITHS, Prof. of Chemistry in the Medical College of St. Bartholomew's Hospital: author of "Recreations in Chemistry," &c.

This interesting and attractive volume is designed to illustrate by easy and familiar experiments, and in popular language, many of the phenomena going on in the realm of nature through the ever-varying year, and to exemplify and explain many beautiful scriptural allusions involving the play of chemical and philosophical laws. Nor has the gifted author failed in accomplishing his laudable purpose. His agreeable style,—the correctness of his philosophical views, and especially the high moral and religious bearing of his work, cannot but secure for him the commendation and patronage of the intelligent and virtuous.

- 
2. *Draper's Chemistry.*—We have just received, through the courtesy of the enterprising publishers, Messrs. Harper and Brothers, a copy of "A Text Book on Chemistry, for the use of schools and colleges, by JOHN WILLIAM DRAPER, M. D., Professor of Chemistry in the University of New York, Member of the American Philosophical Society, &c." It is comprised in an octavo volume of 408 pages, and is what it purports to be—"a compendious book which sets forth in plain language the great features of the science." With the exception of some change in the order of arrangement, the general plan resembles that of Fownes' Introductory Treatise, published during the past

---

year, and of Graham's larger work—a method having decided advantages, as we suppose, over the one adopted by Turner, Kane, &c., where the salts are all reviewed separately and apart from these bases and bi-elementary compounds. Without attempting to examine the importance of every hypothesis maintained by the author, it is enough to remark that Dr. Draper's familiarity with that department of physics upon which he treats, has enabled him to condense and bring up the subject to the present day, and to furnish a correct synopsis of the leading *facts* and *principles* in Chemistry, while his established reputation is a sufficient guarantee for the scientific character of the work.

---

3. *Adulterations of various substances used in Medicine and the Arts, with the means of detecting them, intended as a Manual for the Physician, the Apothecary and the Citizen.* By LEWIS C. BECK, M. D., Prof. of Chemistry in Rutgers College, &c. New York: Samuel S. and William Wood—1846; 333 p. 12mo.

The design of the work is fully set forth in the title, and we doubt not it will prove highly useful, for much injury results from the employment of adulterated articles. The processes proposed for the detection of adulterations are generally quite simple and may be managed by any one, as they are in most instances free from technicalities. The work appears to have been carefully prepared, and the typography is excellent.

---

4. *The Prescriber's Pharmacopæia, containing all the Medicines in the London Pharmacopæia, arranged according to their action, with their composition and doses—by a practicing Physician, altered to correspond with the U. S. Dispensatory, revised and improved by an American Physician.* Second American from the third London edition. New York: Samuel S. and William Wood—144 p. 18mo.

This little work we are persuaded will be found a very convenient reference by many of the junior members of the profession, and to others who may be troubled with a defective memory. It is too often the case that the attention of the young physician is almost exclusively confined to the study of the nature and diagnosis of disease. He gives but a slight consideration to the means which may modify or control morbid action, and as a consequence the range of his resources is quite confined. Many physicians for the want of such knowledge suffer in their reputation. Whilst this work will not supply a lack of knowledge of the action and doses of medicines, it may often serve as valuable purposes at the bed-side of the sick.



### PART III.—MONTHLY PERISCOPE.

*Digestion in 1846.*—At last the phenomena of digestion are enlightened: digestion is no more to be considered a simple but a complex function. There are as many digestions as organs. First, the stomach, by which animal food is dissolved; it is in carnivorous animals almost the only intestine and they require no other; their digestion is gastric; it is intestinal in herbivorous tribes. After the incisors and cuspidati come the molares: in the same manner after the carnivorous intestine we find the intestines which digest grains and vegetables masticated by the molares. In the small intestines, feculent substances are absorbed and saccharified—a fact proved by a simple experiment; secula taken in the stomach immediately above the pylorus will become blue when placed in contact with iodine, and will, on the contrary, not change color after its passage through the pyloric orifice. It is this, the principal phenomenon of digestion in the duodenum, which has led to the discovery of the saccharifying power of the pancreatic secretion. Hence not only a change in the theory of digestion, but in the pathology of diabetes; we can no longer admit that the kidneys secrete sugar, but that they allow the passage of the saccharine matter contained in the blood.

All these discoveries are in themselves important scientific acquisitions; but their importance is doubled when their practical consequences are reflected upon. The whole history of gastralgia, *rudis indigestaque moles*, must begin anew. No theories can be compared to the recent discovery of the following facts. Eat meat, the urine becomes acid; eat vegetables, it immediately becomes alkaline.

The gastric juice is a powerful acid which readily gives birth by fermentation to gaseous products. In dyspepsia it is therefore a mistaken practice to recommend the use of alkaline salts, by which the digestion of animal food is retarded. The corrosive nature of the fluid accounts for gastric pain, pyrosis, &c., most probably the result of its contact with dry portions of the mucus membrane. By fermentation in the stomach, foul breath and flatulency will be produced; alkaline medicines will be of no avail, but mild laxatives are fully indicated. The digestive power of the gastric juice varies with its heat: below 10 degrees and above 35 degrees, that power diminishes and is completely lost beyond 50 deg. It is therefore not proper to eat very hot substances.—*Reaumur's scale.*

The stomach being the organ in which animal food is dissolved, meat should not be given in gastric affection; whereas feculent substances, digested in the jejunum, can be safely permitted.—[*Medical Times from Jour. de Méd.*

*Bile.*—The most careful examinations of the urine and blood of a patient with intense jaundice did not enable Secherer to detect in either of them a trace of any constituent of bile except the colouring matter

and cholestearine. In evidence of the speedy transformation which the biline would probaly undergo in the blood, he mentioned that in a large quantity of green fluid vomited, and containing abundant biliary colouring matter, he could not detect a trace of the biline which it must previously have contained. In the same essay he gives an accurate account of his analysis of the biliary colouring matter which he collected from his patient's urine.

The conclusion respecting the non-existence of the essential principles of the bile in the fæces is confirmed by the delicate test for bile invented by Pettenkofer. To the fluid supposed to contain bile  $\frac{2}{3}$  of its volume of sulphuric acid are added by drops, that the temperature may not rise above 140° F., and then from two to five drops of a solution of sugar (one to four parts of water.) Presently a reddish violet colour appears, intense in direct proportion to the quantity of bilic acid. By this test no bile (except the colouring matter) could be found in healthy fæces; but the fæces of diarrhœa and those discharged after purgatives contain complete bile. So also, by this test, bile could always be found in the urine of the pneumonic.—[*New Orleans Med. and Surg. Journal.*

*Vomiting of Castor Oil injected into the rectum.*—Dr. Griscom reported a case of colic arising from indigestible food. The patient, who was under the charge of Dr. J. R. Wood, was seized with severe pain, with short intermissions, pulse 130 to 140, tongue dry and brown, bowels obstinately constipated, no passage having been obtained by the administration of calomel and jalap, salts and senna, croton oil, and enemata; a large enema was given, which produced evacuations, but this was followed by vomiting, which continued in spite of remedies. The patient was seized on Thursday; on Monday evening following, the vomiting became stercoraceous, and so completely was the peristaltic action inverted, that an injection of castor oil was returned by the mouth in four hours after it was given. He had been taking calomel and opium. Supposing that the opium might have had an influence in causing the vomiting, it was discontinued, and morphine substituted. The pain and vomiting were immediately relieved, and in 24 hours the patient was decidedly convalescent; 20 drops of morphine were given.—[*New York Jour. of Medicine.*

*Necessity for Accuracy in Diagnosis.*—A case is mentioned by M. Rostan, which affords a good example of how much the right treatment of a disease depends on a methodically conducted examination into all the particulars likely to bear on the affection. A female became the subject of an obstinate constipation. The first medical man who saw her suspected the existence of some inflammatory affection, and prescribed the application of leeches. No beneficial effects resulting from this plan of treatment, another physician was consulted, who ordered purgatives: these, however, produced

only temporary relief, and a third medical man was accordingly summoned. He went more methodically to work in his endeavor to find out the real cause of the complaint; he examined the abdomen, and found an ovarian tumor, which was compressing the rectum, and so mechanically caused constipation. The position of the patient in bed was altered so as to relieve the rectum from pressure, and the bowels at once acted.—*Gazette des Hôpitaux*, April 18, 1846.

*M. Gintrac on Diagnosis of Chlorosis.*—M. Gintrac's object is to recognize a condition of the economy, characterised principally by paleness of skin, feebleness and palpitations, but yet quite distinct from that of true chlorosis, and intimately connected with irritation of the digestive canal. The pallor of the skin is of a dead-white instead of the yellowish-green of that disease; and the debility and palpitations are less marked. The *bruit de soufflé* too are less constant. The abdomen is found to be tender on pressure, and the digestive functions are entirely disordered—there being loss of or depravation of appetite, nausea, eructations, constipation or diarrhœa, and sometimes hysterical symptoms. The tongue may be pale, but at other times it is partially red, either at its tip, or in the middle. There is almost always amenorrhœa. M. Gintrac regards these symptoms referrible to the digestive organs as not resulting from pure inflammatory action, but from a complex state of inflammatory irritation and nervous hypersthenia. Preparations of iron and other anti-chlorotic remedies usually aggravate it, while it yields to those of an anti-phlogistic and calming character; such as tisans, milk, infusions of poppies, baths, laxative and emollient enemata, and cupping-glasses to the abdomen. When the symptoms of irritation have ceased, we may resort to tonics and even to iron: but the symptoms then frequently disappear of their own accord.—*Gazette Médicale*, No. 33.

[The distinction here pointed out is an important one: for there can be no doubt that tonics, and especially steel, are frequently hurtful in consequence of sufficient attention not being paid to the removal of a condition of irritation of the digestive organs.]—*Medico-Chirurg. Rev.*

*A point of Diagnosis between Rubeola and Scarlatina.*—It occasionally happens that there is some difficulty of diagnosing the eruption of scarlet fever from that of rubeola, for in the former affection the rash, instead of being, as it usually is, uniformly diffused, occasionally occurs in minute red points and spots, not unlike those of measles. In such cases, when there is difficulty in deciding which disease a particular patient is labouring under, M. Chomel is in the habit of forming his diagnosis by an examination of the sputa. In rubeola, the sputa are invariably, he says, in opaque nummular masses, of a grayish colour, and floating in an abundant liquid. At first sight, they closely resemble the sputa of patients in the second stage of phthisis, yet differ from them in the fact, that the liquid in which



they float is turbid and milky, whilst that in which the sputa of phthisical patients float is clear and transparent.—*Lond. Med. Gaz.*, from *Encyclop. des Sci. Méd.*

*On the Types of Intermittent Fevers.*—M. Nepple has endeavored to determine under what circumstances intermittent fevers may manifest a quotidian, tertian, or quartan type. It would appear that the relative frequency of these types varies with the latitude. Out of 3,114 cases of fever treated at Bona and Algiers,—and out of 954 cases treated in the Canton of Monthiel (Ain), the types were as follows :

| Bona and Algiers.                | Ain, France. |
|----------------------------------|--------------|
| Quotidian fevers . . . . . 2,181 | 443          |
| Tertian . . . . . 901            | 420          |
| Quartan . . . . . 32             | 91           |

All medical writers who have written on fevers, as it exists in northern climates, agree in regarding the tertian as the most common type; while the above facts prove that the quotidian is more frequent in warmer latitudes. The quotidian type, according to M. Nepple, occurs most frequently in warm years, while the tertian form is, on the other hand, most frequent in cold years. The quotidian type of fever appears to be less dependent on marsh miasmata than on accessory circumstances.—*Gaz. Méd.*, from *Lond. Med. Gaz.*

*Remedy for Sea-sickness.* (*Gazette Médicale de Paris.*)—M. Jobard, of Bruxelles, has addressed a note to the Academy of Sciences at Paris, in which he proposes a remedy against sea-sickness. He observes that this is not a pathological affection which can be prevented by medicines. The cause of sea-sickness is purely mechanical; it is not the air of the ocean, neither the odor of the ship which provokes it. Whether sitting or lying down one experiences an alternate movement of elevation and depression while at sea, and it is always during the sinking of the vessel, and never at its ascension, that the sickness occurs; from which circumstance M. Jobard concludes that sea-sickness is produced by the mass of the intestines rising up against the diaphragm and exciting hiccup or vomiting, with compression of the gall-bladder and expulsion of bile from the stomach. It is at the plunge of the ship that the sickness is felt, while a respite is experienced as she rises out of the sea.

The means then to prevent sea-sickness is to prevent the intestines rising up against the diaphragm; and this is accomplished by sustaining them upon the pelvis by a belt. A broad bandage or belt, so as not to compress the stomach, moderately tight at first, and then more forcibly applied, was found to relieve all the passengers of a ship during a long and painful voyage.

*The use of the preparations of Nux Vomica against Chorea or St. Vitus' Dance.* (*Gazette Médicale de Paris.*)—Professor Trousseau read a memoir to the Academy of Medicine in Paris on the 3rd

of last November, on the employment of the preparations of Nux Vomica in the treatment of St. Vitus' dance. He said Messrs. Lejeune, Niemann, and Cazenave, had cited some isolated facts, but to Messrs. Forcilhoux and Rouvier, of Lyons, and himself, were due the present mode of using this article. M. Trousseau states that he was lead to this treatment of chorea by two motives: one, because there was almost always incomplete paralysis of one side of the body in this affection; and the other, because the preparations of nux vomica provoked tonic contractions resembling those of tetanus. He treated thirteen patients, ten with complete success. An amelioration was ordinarily manifested after eight or ten days of treatment; the cure affected the oftenest at the end of one month.

The author insists upon the necessity of great care in the preparation of this medicine and upon the mode of its administration. He rejects the extract of nux vomica and strychnine, and adopts exclusively the *sulphate of strychnine* which he dissolves in simple syrup in the proportion of 5 centigrammes to 100 grammes of syrup. He gives at first 10 grammes of the syrup or 5 milligrammes, equal to a tenth of a grain of the salt of strychnine, divided into four or six doses in the course of twenty-four hours. Every day increase 5 grammes up to the moment when the patient manifests itching in the head and slight muscular stiffness. He always goes to the extent of this degree of muscular action. The dose must be increased or diminished according to the effect produced by the medicine. When the disease is nearly cured, the same dose is continued for some days; then it is diminished, and finally left off when there only remains a slight grimace which so often continues in these cases.

While M. Trousseau considers the syrup of the sulphate of strychnine the principal medication in chorea, he still prescribes for other indications that may occur in this affection—bleeding for amenorrhœa with plethora; the martial preparations for chlorosis; antispasmodics for hysteria.

Dr. Hogan, in the New Orleans Medical and Surgical Journal for September, recommends strychnine for chorea in  $\frac{1}{20}$ th to  $\frac{1}{8}$ th of a grain for a dose, three times a day. [Edts.]

*Therapeutic action of Chloride of Sodium [common salt].* (Gaz. Médicale de Paris.)—M. Plouviérs, of Lille, stated to the Academy of Sciences, that since 1842, he has been experimenting with this article. He found that after taking during six weeks, a tea-spoonful, then a tea-spoonful and a half of this salt every morning in a cup of milk, he became stronger, more active and weighed 5 kilogrammes (about 15 pounds) more than he did before. In continuing the use of the salt, he became plethoric, and had to cease taking it. Subsequent experience multiplied and varied, has convinced him that common salt possesses a high importance in assisting digestion. He thinks in persons of a sanguine temperament or apoplectic tendency

it is dangerous ; but to weak constitutions without disease, it is incontestably useful ; and to labourers and the poor, it would assist much in their nourishment.

*The employment of preparations from the Walnut tree against Diarrhœa and Dysentery.* (Gazette Médicale de Paris.)—M. Scotti having observed among scrofulous patients who used the preparations of the Walnut tree, an habitual constipation, concluded he could find in this remedy an agent against diarrhœa. In thirty patients he either obtained a cure or at least an immediate amelioration in those not affected by organic lesion. The preparation he prefers is an extract from the green walnut shell or the fresh leaves, obtained by decoction and successive evaporation. Dissolve from 8 to 12 grammes, about 2 3, of this extract in a kilogramme, about 2 pints, of mineral lemonade, and take a third or a half tumbler of this drink four times a day.

*Tannate of Iron in Chlorosis.*—M. Benedetti considers that the tannate of iron (ink) is one of the best remedies in the treatment of chlorosis. The dose may be from about eight to thirty grains daily ; and the patient commonly recovers in from twelve to twenty-five days.

The tannate of iron employed by him is prepared by dissolving iron filings in dilute sulphuric acid, precipitating by carbonate of soda, so as to obtain a pure carbonate of iron. Forty-four parts of this carbonate, in a state of dry powder, are to be added to nine parts of pure tannic acid, dissolved in boiling water. The mixture is stirred and evaporated until the tannate is obtained as a dark, insipid, uncrystalline compound. It may be given suspended in syrup, or in the form of pills.—*Lond. Med. Gaz., from Gaz. Méd.*

*Dysentery Syrup.*—The Boston Med. and Surg. Jour., gives the following as an approved recipe for Dysentery : “It is made of a decoction of the *rubus villosa*, *spina tormentosa*, slippery elm, iceland moss, rhubarb, sugar, and a small portion of brandy, in such proportion as experience justifies.”—*Western Lancet.*

*Alkalies in the Treatment of Hooping-cough.*—Dr. Allnat, London, attributes the spasmodic action of the glottis, which occurs after the febrile action has somewhat subsided, to the presence of acid in the stomach ; to relieve this, alkalies—ammonia, carb. potass, &c.—are advised. He says :

After preliminary purgation with calomel, (conjoined with antimony, if the febrile symptoms run high,) and an occasional emetic to clear the stomach, nothing in my experience is so efficacious as small and repeated doses of the carbonate of potassa. The following combination has been extensively distributed to the poor in seasons when hooping-cough has raged as an epidemic, and I can attest the almost invariable success which has attended its administration—



what portion of the merit is due to the cochineal I do not know:—Take of carbonate of potassa, one drachm; cochineal, ten grains; boiling water, half-a-pint. For an infant, one teaspoonful to be taken thrice daily, the dose increased according to age.—[*London Lancet*.

*Internal administration of Iodine.*—M. Marchal de Calvi, of the Hospital of Val-de-Grace, has been employing for some time past iodine in a new form. The iodine is dissolved in oil, in the proportion of 1 grain to 18 grains. He takes afterwards a certain fixed quantity of the solution, mixes it with gum in a mortar, and forms an emulsion.

M. Marchal commences by prescribing one grain of iodine, or eighteen grains of the oily solution. The dose may be gradually augmented to six grains. Notwithstanding so large a dose has been used no unpleasant effects have been produced on the digestive tube. The patients preserve their appetite, and digestion is performed properly. This new preparation has been used with remarkable success in many cases of scrofulous swellings of the glands that had attained very great volume. Iodine in this form remains for a much longer time in the economy than the iodine with potassa. In place of iodide of potassium, M. Marchal uses the iodide of sodium, because he thinks it more active, from its containing a greater equivalent of iodine than the preparation containing potassa.—[*West. Jour. of Med. and Surg.*

*Combination of Carbonate of Iron with Sulphate of Quinine in Remittent Fever.*—Prof. Lippich, of Padua, recommends the addition of the carbonate of iron in the sulphate of quinine, in the treatment of periodical fevers. The following is his formula: R. Carbonate of iron, one gramme; sulphate of quinine, one gramme; extract of taraxacum, q. s. To be made into a mass of proper consistency, and divided into thirty pills, two of which are to be taken every two hours. The carbonate of iron may be gradually increased to two grammes.

[*Gaz. Méd. de Paris*, from *Boston Med. and Surg. Jour.*

*Hydrate of Lime in Diarrhœa.*—Simple syrup, saturated with hydrate of lime, has been employed by Dr. Capitaine as an antacid, in doses of from one scruple to half a drachm: and at the hospital Neckar, it has been given with much benefit instead of cow's milk in the diarrhœa of children.—[*St. Louis Med. and Surg. Journal*.

*Prescriptions of Prof. Linton, of St. Louis, for Dropsy.*

R. Sup. Tart. Potas. . . . 2 dr.  
 Jalap, . . . . ½ dr.  
 Gamboge, . . . . gr. 1 M.

The preparations of iron are, we believe, the best tonics which can be used in those cases of dropsy, (and they are numerous) in which a roborant treatment is indicated.

We cannot help regarding a sort of old woman's prescription, a

roughly prepared acetate of iron made by putting a handful of rusty nails into a pint of old cider, as one of the best, if not *the best*, preparation for this invaluable tonic. We have "seen with our eyes" its happy effects in scores of cases, to say nothing of that less to be credited testimony—what we have "heard with our ears."—[*Ibid.*

Dr. W. L. Sutton of Georgetown, Kentucky, in an able article on Scrofula, submitted to the Medical Society of Tennessee in May 1846, and published in the November No. of the Western Journal of Medicine and Surgery, draws the following conclusions on this subject:

*Conclusions.*—After such reflections as I have been able to make, I arrive at the following conclusions:

1st. That in a vast majority of instances scrofula owes its existence to inheritance; yet

2d. That there is no absolute necessity that a child having a scrofulous parent shall be scrofulous; on the contrary,

3d. That when one parent is scrofulous and the other not, a child which resembles the scrofulous parent will be much more apt to have scrofula than one which resembles the other parent; in fact, that the latter may have a well-grounded hope of escape.

4th. That the liability by inheritance depends upon a general, not upon a specific law, which is applicable to other diseases besides scrofula.

5th. That whilst a child born of scrofulous parents may escape, one born of parents not at all scrofulous, may have the disease.

6th. That scrofula depends upon an undue preponderance of the white parts of the blood, and the white tissues in the body.

7th. That in our treatment we should endeavor to restore a due proportion of the red particles to the blood, and of the red tissues to the body.

8th. That to effect this there is no specific; but we must be guided by general principles and rational views, precisely as is necessary to treat successfully any other disease.

9th. That how important soever medicine may be in the management of the disease, hygienic rules are by no means less so.

*Cure for Bite of Rattle Snake.*—Dr. Nathan Holmes, of St. Louis, Mo., announces that whiskey, or any other stimulus, freely given till there is a high pulse, will cure the bite of the rattlesnake. He says that he doubts whether fifty rattlesnakes could poison a man when fully drunk.—[*Boston Med. and Surg. Journal.*

*Alum and Nitre for Gonorrhœa.*—Dr. Foster reported having recently used *alum pulv.* and *nitrat. potass. grs. xv.* and *x.*, three times a day, with the most happy effect, in two cases of gonorrhœa. In one case the discharge had existed ten days; in the other, two months.—[*New York Journal of Med.*

*Mode of arresting Hemorrhage from Leech-bites.*—Dr. Houston recommends the following plan for preventing excessive bleeding from leech-bites, which he has found invariably successful. Take a small pinch from the felt of a beaver hat, pile it on the bite; or if there be several points, pile one respectively on each, and spread over the whole a piece of thin muslin, drawing it tightly, so that any blood that flows must pass directly through both; then with a fine sponge drying up the blood as it oozes out, and in a short time both felt and muslin will have become dried by the coagulation of the blood in the thin fine meshes, and the hemorrhage arrested. The muslin may then be all cut away, except the adhering points, which, in the course of a couple of days, will of themselves drop off, leaving the parts healed, and free from any such disfiguring marks as those which necessarily follow cautery, caustics, or needles.—[*Dublin Hosp. Gaz.*

*Operation for Aneurism.*—The following conclusions, as the result of his experience in operations for aneurism, are drawn by Mr. Guthrie, in a lecture delivered by him at the Royal Westminster Ophthalmic Hospital:

1. That the theory of the operation of aneurism, as dependent on the collateral circulation, cannot be applied with safety to spurious aneurisms of recent occurrence dependent on wounded arteries.
2. That it is inapplicable to wounded and bleeding arteries.
3. That the length of time a spontaneous aneurism has existed is of consequence, as connected with the collateral circulation; although an aneurism should never be allowed to attain that size which may render it injurious to the surrounding parts.
4. The collateral vessels are at all times and under all natural circumstances capable of carrying on the circulation in the upper extremity, whatever disease or injury may affect the principal trunk, provided a due degree of care be taken to maintain the temperature of the part. Whenever the reverse takes place, it is an exception to the general rule.
5. After operations for aneurisms in the lower extremity, the collateral branches are almost always equal to carry on the circulation through the limb.
6. When the principal artery of the lower extremity is suddenly divided, without any previous disease having existed, mortification is not an uncommon occurrence, and is more likely to take place in old than in young persons.
7. When under such circumstances the principal vein is also divided, mortification seldom fails to be the consequence.—[*Med. Times.*

*Treatment of White Swelling.*—Dr. Blakey details two cases of the successful employment of the *Chimaphila Umbellata* (pipsissewa, wintergreen) in the treatment of white swelling. The first case, a boy of a scrofulous family, is thus described:

“When I examined my patient, I found one of his knees three



times its natural size, the skin of the leg of an unnatural ashy color, the boy being tolerably black for one of his race; considerable wasting of the limb, pulse 96, and some white fur upon his tongue. I looked upon the case as scrofulous white swelling, and concluded in my own mind there could be little done towards effecting a radical cure, as I had often treated and seen such cases treated, but had never known a cure to follow, but more or less lameness to inevitably succeed all our efforts, if we did not ultimately have to resort to the knife to rescue the sufferer from the grave.

I commenced giving my patient the infusion of pipsissewa, a pint to be drank each day. The formula for making it I took from Wood and Bache's Dispensatory, and twice a day, morning and night, I had a fresh poultice made out of oat-meal and the infusion, and applied to the whole knee; diet light, and to keep the recumbent position."

The treatment was continued from Feb. 5th to April 15th, when the patient was discharged cured.

*Topical Treatment of Certain Diseases of the Skin.*—M. Cazenave prescribes, often with success, the use of simple acidulated lotions, in certain slight cases of achne, behen, pityriasis, herpes and even eczema. He often, also, in cases of impetigo, when the crusts have fallen, employs with advantage a solution of alum, as follows:

Alum, . . . . . two drachms.

Infusion of roses, . . . . . ten ounces.

The alum may be increased to three drachms, but the lotion that succeeds the best is the following:

Bichloride of mercury, . . . . . two grains.

Chlorohydrate of ammonia, . . . . . two grains.

Emulsion of almonds, . . . . . eight ounces.

When in eczema, the eruption is chronic, M. Cazenave makes use of the following:

Azotic acid, . . . . . 25 drops.

Chloro-hydric acid, . . . . . 25 drops.

Distilled water, . . . . . 9½ ounces.

[*Jour. de Pharm.*, from *South. Jour. of Med. and Pharm.*]

*Prof. Porta on Deligation of Arteries.*—Of 600 cases of the ligation of the large arteries on record, gangrene has occurred in 50. Of 132 operations in the carotids, it occurred in 1; of 156 cases of ligation of the innominate, subclavian, axillary and humoral, in 7; and of 302 operations in the lower extremities, in 42.—[*Medico-Chirurg. Rev.*]

*New Sign of Death.*—M. Ripault has called the attention of the French Academy of Science, to a new sign of death, which consists in the flaccidity of the iris; the pupil losing its circular form when the globe of the eye is pressed in two opposite directions; but remains round, notwithstanding the compression, when life is not extinct.

[*Western Lancet.*]

## MEDICAL INTELLIGENCE.

*Notice of the III. Volume.*—In issuing the first No. of a new volume, we again solicit the assistance and kind co-operation of our subscribers, to sustain this Journal. Our experience has taught us, that the labour of conducting the work is sufficient to occupy our time and attention, without being compelled to write articles and essays for it. We would much prefer, moreover, to publish communications coming from our friends. We respectfully ask our subscribers to increase the usefulness and importance of the Southern Medical and Surgical Journal, by contributing to its pages. Essays on any subject connected with medicine, report of cases, or facts relating to the profession, will be thankfully received from any source.

Our Publisher will be obliged to any one for an increase to the subscription list.

*A new prescription for Burns and Blisters.*—During a recent visit to Aiken, we learnt from a medical friend, a domestic preparation used in that neighborhood for burns, blisters, and denuded surfaces. It is an ointment made of equal parts of white of egg, beaten up to a froth, and fresh lard. A little morphine or chloride of sodium we think might be added with advantage.

**METEOROLOGICAL OBSERVATIONS**, for November, 1846, at Augusta, Ga. Latitude 33° 27' north—Longitude 4° 32' west Wash. Altitude above tide 152 feet.

| DAY. | Sun Rise. |           | 2, P. M. |           | WIND. | REMARKS.                          |
|------|-----------|-----------|----------|-----------|-------|-----------------------------------|
|      | Ther.     | Bar.      | Ther.    | Bar.      |       |                                   |
| 1    | 62        | 29 80-100 | 72       | 29 78-100 | S. E. | Cloudy—drizzle.                   |
| 2    | 64        | " 75-100  | 76       | " 76-100  | S. W. | Rain at 3 A. M., 1 in. and 5-100. |
| 3    | 58        | " 84-100  | 76       | " 85-100  | N. E. | Cloudy.                           |
| 4    | 64        | " 84-100  | 75       | " 76-100  | N. E. | Flying Clouds.                    |
| 5    | 56        | " 82-100  | 53       | " 74-100  | N. E. | Rain.                             |
| 6    | 50        | " 65-100  | 51       | " 65-100  | N. E. | Rain.                             |
| 7    | 51        | " 65-100  | 56       | " 62-100  | N. W. | Rain.                             |
| 8    | 55        | " 71-100  | 67       | " 71-100  | S. E. | Cloudy.                           |
| 9    | 50        | " 83-100  | 78       | " 83-100  | S. W. | Fair.                             |
| 10   | 52        | " 90-100  | 79       | " 90-100  | S. W. | Fair.                             |
| 11   | 53        | " 90-100  | 78       | " 84-100  | S. W. | Fair.                             |
| 12   | 49        | " 85-100  | 72       | " 80-100  | N.    | Fair.                             |
| 13   | 46        | " 80-100  | 70       | " 87-100  | N.    | Fair.                             |
| 14   | 46        | " 83-100  | 70       | " 81-100  | E.    | Fair.                             |
| 15   | 45        | " 83-100  | 74       | " 83-100  | W.    | Fair.                             |
| 16   | 46        | " 85-100  | 70       | " 89-100  | E.    | Fair.                             |
| 17   | 47        | " 94-100  | 70       | " 92-100  | E.    | Fair.                             |
| 18   | 45        | " 92-100  | 69       | " 86-100  | S. E. | Fair.                             |
| 19   | 55        | " 58-100  | 55       | " 55-100  | W.    | Rain in morning.                  |
| 20   | 37        | " 82-100  | 60       | " 85-100  | N. W. | Fair—first frost.                 |
| 21   | 33        | " 85-100  | 64       | " 85-100  | N. W. | Fair—ice.                         |
| 22   | 33        | " 61-100  | 55       | " 47-100  | W.    | Rain—heavy blow—storm.            |
| 23   | 32        | " 91-100  | 58       | " 94-100  | N. W. | Fair.                             |
| 24   | 33        | " 87-100  | 64       | " 66-100  | S.    | Fair—storm at night—r. 80-100.    |
| 25   | 45        | " 39-100  | 48       | " 47-100  | N. W. | Fair—severe blow last night.      |
| 26   | 30        | " 92-100  | 47       | " 97-100  | N. W. | Fair—stiff breeze.                |
| 27   | 24        | " 30-100  | 45       | 30        | S.    | Cloudy.                           |
| 28   | 45        | " 30-100  | 51       | 29 97-100 | S. E. | Rain, 30-100.                     |
| 29   | 53        | " 97-100  | 72       | " 97-100  | W.    | Fair.                             |
| 30   | 42        | 30 5-100  | 62       | 30 3-100  | E.    | Fair.                             |

18 Fair days. Quantity of Rain 2 inches and 15-100. Wind East of N. and S. 12 days. West of do. 14 days.

# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—FEBRUARY, 1847.

[No. 2.]

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE V.

*Alcohol.* By A. MEANS, M. D., Prof. of Chemistry and Pharmacy in the Medical College of Georgia, and Prof. of the Physical Sciences in Emory College, Oxford, Ga.

This singular and wonderful compound, now extensively known throughout the civilized and a large portion of the savage world, and employed under some form or other, as a stimulating beverage by so many millions of the human race, cannot but present a subject of interesting consideration to the medical profession. Its prompt, powerful, and peculiar effects upon the animal economy, and the lamentable evils which its habitual use has for centuries entailed upon the physical, mental, and moral man—often ruinously involving the fame, fortunes, and happiness of thousands, and hurrying myriads of victims to an untimely grave, challenge a scientific examination into its HISTORY, PHARMACEUTIC ORIGIN AND USES, CHEMICAL CONSTITUTION, MEDICAL CLAIMS, and MODUS OPERANDI: together with the PHYSIOLOGICAL and PATHOLOGICAL PHENOMINA consequent upon its administration, and the ANTIDOTAL TREATMENT required. For while, from its solvent, stimulant, styptic and antiseptic properties, it has strong claims to a respectable position upon the list of therapeutical agents, yet the frequent, fearful, and often fatal derangements—organic as well as functional, which it superinduces in the animal economy has sufficiently warranted its classification among narcotico-acrid poisons—the place assigned it by Dr. Orfila, in his valuable and extensive work on Toxicology, and since adopted by the distinguished Edinburgh Professor, Dr. Christison, in his more scientific and elaborate treatise upon the same subject.



ITS HISTORY.—The time of the *discovery* of the alcoholic *principle* is not reported by the most ancient writers, nor can it be found even in the legends of tradition. The knowledge of its *existence*, however, can be traced to a very remote period in the history of our race. By the oldest and most veritable of histories we are informed that the patriarch Noah cultivated the vine, and was inebriated with its fermented juice immediately after the deluge, which is fixed by the best chronologers in the 1656th year from the creation, or B. C. 2348 years,—giving an antiquity to this beverage (i. e. wine) of 4194 years. From the same authentic source we learn that the Jews were for centuries acquainted with its use. The venerable Lot's incestuous debauch, Nabal's wine-maddened feast, Belshazzar's bacchanalian revel, Ammon's drunken murder, Benhadad's bestial inebriation, and Uriah's stupid sottishness on the night before he fell—all, all seem to have been preserved upon Revelation's page to inspire the disgust of posterity against the loathsome and damning evils of intemperance, and to signalize the righteous retributions of Heaven against its iniquity, whether found in a patriarch, a king, or a dependent. From profane history we also glean some relevant facts. Homer reports the use of *wine* in one of his immortal poems, i. e. the *Odyssey*, written according to Velleius Paterculus about 960 years before the Christian era, and Herodotus, the oldest accredited historian, who completed his celebrated work 445 years before Christ, mentions the use of *malt liquors* in Egypt, five years anterior to that date (i. e. 450 B. C.).

The first *distillation* of Alcohol, has been attributed by some to an Arabian chemist who lived about nine centuries ago. About the 13th century, Dr. Raymond Lully, a learned native and divine of the island of Majorca, whose pharmaceutical knowledge seems to have been in advance of the age in which he lived, and who is known to have prepared the Oil of Rosemary, the Acetate of Lead, and several of the salts of Mercury, has also indicated his acquaintance with the Spirits of Wine, which he reports under the appellation of "*Aqua Ardens*." Although the French chemist, Thenard, is disposed to attribute its discovery to Arnold de Villeneuve, at Montpellier, "early in the 14th century." So that this singular and powerful chemical compound has an authenticated existence of at least 500 years.

ITS PHARMACEUTICAL ORIGIN AND USES.—Alcohol, although formed from organic matter, yet is never found in the natural and healthful condition of any product of the animal or vegetable king-

doms. It is only when the laws of life have ceased to act, and the elements of the organized tissues, no longer under their control, are excited by the presence of putrescible nitrogenous matter, to abandon their former relations, and unite in the formation of one or more new compounds, under the action of new affinities, that this strange and important fluid is obtained. The peculiar metamorphosis referred to, is effected in the vinous fermentation, and this must be preceded by the saccharine fermentation, or the presence of sugar and water, or, at least, of some amylaceous substance, as malt, potatoes, &c., readily convertible into sugar, from the starch which it contains.

It seems indispensable to the production of the result that some azotized body, as albumen, or gluten in a certain stage of decay, be present to commence the fermentative action. This is effected, not by a combination of the yeast or ferment with the elements of the liquid, but by what has been denominated by Berzelius a *catalytic force*, which seems to operate by disturbing the molecular equilibrium of the compound mass, and breaking up its existing affinities, and allowing no relapse to its former condition, but propagating through the whole the same corpuscular motion, which characterizes the catalytic agent:—*that*, in the mean time, maintaining its unimpaired and independent identity. This change goes on most rapidly at the temperature of 75° or 80° of Farenheit's thermometer. The products formed are purely *carbonic acid gas* and *alcohol*. But after the effervescence, occasioned by the liberation of the gas, has terminated and the liquid has become clear, the process must be *arrested* by the exclusion of air, or exposure to cold, or the *acetous fermentation* will supervene, by the presence of the Alcohol and Oxygen—1 atom of the former absorbing 4 atoms of the latter, and by affinity change, turning out 1 atom of anhydrous acetic acid and 3 of water. At this stage, then, the mass should undergo *distillation*, which ought to be repeated several times till the resulting spirit has a specific gravity of .838—water being 1000. This is the strength of Rectified Spirit or the commercial Spirit of Wine, which still retains 13 or 14 per cent. of water. By distilling with half its weight of quick lime, to absorb the water, *absolute alcohol* may be obtained of .793 specific gravity, whose boiling point is about 173° Farenheit. This substance, however, save for purposes of chemical analyses, where it acts a most important part in determining the purity of other substances, as Iodine, the vegetable Alkalis, Castor Oil, &c., is never

employed of the strength ordered in the pharmacopœias. When used, therefore, as an article of officinal pharmacy, for preparing tinctures, spirits, extracts, &c., Rectified Spirits (sp. gr. .838) or Proof Spirit (sp. gr. .920) is the form almost universally preferred.

The different descriptions of spirituous liquors sold in the commercial world, and which have for centuries constituted the fruitful source of crime and wretchedness over a large portion of the civilized population of the globe, are derived from a variety of substances, and exhibit but so many different forms of diluted Alcohol—from the more pungent and fiery fluids, as Brandy, (Cognac.) Rum, Scottish and Irish Whiskey, &c., containing from 53 to 54 per cent. of the pure spirit, down through the list of stronger *wines*, as Lissa, Madeira and Port, with from 24 to 25 per cent. to the milder class, as Gooseberry, Champagne, &c., with 11 or 12 per cent.—and farther still, till we reach the cheaper fermented liquors consumed by the peasantry of many countries, embracing Ale, Porter, Small Beer, &c., &c., and furnishing an alcoholic per centage of only from 10 to 1.2.

Indeed almost every fruit and saccharine juice may be made to yield this valuable spirit in some form. Arrack, the popular drink in Batavia, is obtained from Rice—Palm wine in Ceylon, from the Cocoa Nut, and the Koumiss, a common beverage of Tartary, from Milk, while in *any country* which grows them, the Sugar Maple, Beets, Parsnips, Potatoes, &c., yield it in abundance when tortured by the various processes which art has devised.

ITS CHEMICAL CONSTITUTION, &c.—Alcohol has been ranked by some chemists among the *Oxyhydrocarbons*—a class of bodies including the Ethers, many of the vegetable Acids, Creosote, Petroleum, &c.

According to this view, the elementary composition of Alcohol is expressed by the formula,  $C_4 H_6 O_2$ .\* But since the adoption of the hypothetical radical, Ethyl, existing in Ether and its compounds, the aggroupment of the elements is believed to be different, and Alcohol is regarded to be the *Hydrated Oxide of Ethyl*. Ethyl itself being a Hydrocarbon and represented by the formula  $C_4 H_5$ —leaves 1 atom of Hydrogen and 2 of the Oxygen, as contained in the first formula to be appropriated thus—viz: 1, of the 2 atoms of Oxy-

---

\* As the *chemical constitution* of bodies depends upon *molecular attractions*, it is supposed that 4 *atoms* of Carbon, 6 *atoms* of Hydrogen, and 2 *atoms* of Oxygen, unite under their *affinitary habitudes* to form 1 *atom* of Alcohol.



gen goes over to oxydize the comp. radical, Ethyl, while the other atom of Oxygen unites with the atom of Hydrogen to form *water*—which combining with the now oxydized base, *hydrates* it, and gives the following formula for the Hydrated Oxide of Ethyl, or, *Alcohol*—viz:  $C_4 H_5 O -|- H O$ . Now, *grape sugar*, into whose aggroupment of elements all other sugars must be turned, before they can generate the spirituous fluid in question, consists, according to the best authorities of  $C_{12} H_{12} O_{12}$ , and when the play of affinities commences under the fermentative action, these elements will be found to be converted into precisely 2 atoms of Alcohol, i. e., 2 ( $O_4 H_5 O -|- H O$ ) and 4 atoms of Carbonic Acid, i. e., 4 ( $C O_2$ )—the *one*, a *fluid*,—the other, a *gas*—embracing together the *same* simple constituents, but under new atomic arrangements, and each new compound, in form and character, totally distinct from the bland and nutritive *solid* (sugar) to which both are indebted for their pater-nity. Alcohol boils at the temperature of  $173^\circ$  Far. when the barometrical pressure is 29.5 inches, but has never yet been subjected to a degree of cold sufficient to congeal it. Prof. J. K. Mitchell, of Philadelphia, who by evaporating the compound of solidized Carbonic Acid and Sulphuric Ether in the vacuum of an air pump has procured the lowest thermometrical temperature hitherto attained, has succeeded in reducing the consistency of Alcohol of sp. gr. .793 to that of oil or melted lard at  $130^\circ$  below zero, and at  $-146^\circ$  it “flowed like melted wax,”—and should chemical research ever discover a mode of effecting a depression in temperature a few degrees farther, there is no question that this volatile, sparkling, mobile *fluid*, would be transformed into a frigid, motionless, massive *solid*, probably as malleable as quicksilver at  $-40^\circ$ . When vaporized at the usual pressure of the barometer, it expands so as to occupy 659 times its former volume—its vapor weighing “half as heavy again as air,” which is estimated at 31.0117 grs. to the 100 cubic inches. It is familiarly known to be highly combustible, and in burning emits intense heat, with little light and no smoke—the chemical action being prompt and perfect between the Oxygen of the air and the Hydrogen and Carbon of the liquid, transforming them rapidly into *water* and *carbonic acid*, which constitute the entire products of the combustion—both being sent off as invisible vapor, but the former readily made visible by allowing it to condense upon a cold plate or polished ball of metal, held over the flame. It unites with water in *all* proportions, and in the act of combination, evolves heat. Its

strong affinity for water, and its great solvent powers, exercised over many organic substances, render it a valuable agent in Pharmacy. Hence those salts which are insoluble in this menstruum, but have been dissolved in water, are precipitated immediately upon the introduction of Alcohol, which has a stronger affinity for the water than the latter has for the suspended salt. On the contrary, those substances which are readily soluble in Alcohol, as Gum Camphor, Oils, Resins, &c., are instantly liberated by the addition of water, and from a state of invisible diffusion, instantly appear in the form of an opaque, heavy precipitate.

The anti-putrescent properties of Alcohol, which have long made it a valuable agent in the preservation of anatomical specimens, is probably owing, first, to the exclusion of the Oxygen of the air, whose presence always hastens the putrefactive fermentation; secondly, to its capability of dissolving the extractive matter, ozmazome, from animal muscle, and coagulating the albumen and fibrin; and, thirdly and mainly, to its great affinity for water, which is known rapidly to promote decomposition, and which it absorbs powerfully from the tissues exposed to its action—rendering more compact their texture, and reducing their volume.

**ITS MEDICINAL CLAIMS.**—As a therapeutic agent, Alcohol is generally used in some of its diluted forms, and in none, perhaps, more frequently or effectively, than in that of the “*Spiritus Vini Gallici*” of the London pharmacopœia, (the “*Eau de vie*” of the French,) being an ardent spirit distilled from wine, and differing somewhat in strength, color, and flavor, owing to the quality of the wine, mode of manufacture, &c.

The brandys of Bordeaux, Cognac and Armagnac are, perhaps, most in repute, but all of them may be found to contain from 53 to 55 per cent. of Alcohol, diluted with water, and in combination with a *volatile oil*, now called *Œnanthic Ether*—(itself a hydro-carbon) which gives to wine that peculiar flavor and odor, that contradistinguishes it from all other fermented liquors. Acetic acid is also found, together with a small quantity of Acetic Ether, coloring matter and Tannin. Whether the latter article, is obtained from the wood of the surrounding cask, or from some astringent added to heighten the color, is not known. The “*Spiritus Sacchari*” or Rum, such as is distilled in Jamaica from Molasses, or the drainings and washings of sugar boilers, has about the same strength, and though generally considered as more sudorific, is popularly employed for the

same purposes. In either of these forms however, the physiological effects depends upon the presence of the reigning spirit, (Alcohol) which is a *rapidly diffusible stimulant*, making a prompt and powerful impression upon the stomach, and through that viscus and its appendages transmitting its action to the most remote organs and tissues of the human body. As a remedial agent it has been variously classed by different pharmacologists. By Eberle, it is ranked with the third class of *Stimulants*, which he denominates *Incitants*. By Dunglison, it is classed with stimulants, but under the subordinate division *special excitants*; and by Pereira, with his *cerebro-spinants* of the 7th order, comprizing other "incubriating, paralyzing stupeficients," as Ether, Protoxide of Nitrogen, Cannabis Indica, &c.—the same general action upon the animal organism, being, however, ascribed to it, by them all. And here, perhaps, we may be allowed to remark, that while its pharmaceutical value is indisputable in effecting the solution of many gum-resins, balsams, essential oils, &c.—thus furnishing an appropriate menstruum for their preservation and exhibition, for which there is no adequate substitute now known, yet there is scarcely a case within the range of professional practice, requiring the action of excitants at all, in which its administration may not be waived by the vicarious employment of some one or more articles of the class. It is nevertheless, a convenient and efficient drug when in the hands of a discreet and skillful therapist, but from the insidious and stealthy inroads which it rarely fails to make upon the physical and moral constitutions of its unsuspecting victims:—effected too, under the plausible pretensions of its hygienic or restorative properties, and often with the imposing and prevalent passport of professional authority, it should be kept like the fleet, but disciplined grey-hound, constantly under collar, only to be slipt when game is in sight, and forthwith restored to its leash when the chase is over. Its medicinal properties, however, may be made available *internally* in cases of *asthenic dyspepsia*, where the want of proper contractility in the muscular fibres of the stomach, involves a defective assimilation of its ingesta to the purposes of the animal economy—a disease too often superinduced by the habitual use of the *very article* under consideration. Here the remedy acts by whipping up the languid energies of the organ to more vigorous muscular action, and by inducing a temporary increase of the gastric secretions. And yet, probably, in nine cases out of ten, where this adynamic condition of the digestive apparatus requires the interfer-



ence of incitants *at all*, the continued use of pulverized capsicum with appropriate food, or in conjunction with an equal quantity of gentian, would yield decidedly more permanent and happy results. In the form of *Wine* or bottled *Porter* its use is sanctioned in the last stages of fever, or in low and exhausted conditions of the system, originating from other causes. In ataxic diseases, tetanus, metastasis of rheumatism, &c., it sometimes manifests its best powers. When in the active practice of the profession, several years ago, I was called to a painful case of acute rheumatism in the knee joint of a servant boy. The high vascular action and great general excitement, clearly indicated, as I thought, the propriety of venesection. Fearing a transfer of the disease to some vital organ, I bled carefully and moderately; laid an emollient fomentation to the joint; gave some other directions, and then went to my room (about 200 yds. distant) and was in the act of retiring to rest, when a messenger came in haste, requiring my immediate presence again with the patient. I had not been absent, perhaps, more than 15 minutes, when on my return, I found him supported with difficulty in an erect posture upon his bed, his respiration, interrupted, labored and noisy, his abdomen, and especially the epigastric region, swollen and tympanitic, and the whole man suffering an intensity of agony which must soon have extinguished life. A sudden and fearful metastasis of the disease from the knee to the *stomach* was clearly developed, and required prompt and bold treatment. In the emergency, and perhaps within the space of two hours, the patient drank one pint of hot strong *Rum toddy*, with 2 ounces of Laudanum, which together with the external application of a large mustard cataplasm, entirely overcame the gastric distention and spasm, and opened the way for a speedy recovery. Here it is true, the alcoholic principle was only expected to act the part of an *auxiliary* in the cure, but did so decisively and satisfactorily.

In atonic and tetanic cases, alcoholic drinks may be given in large quantities without producing the slightest intoxication. In the form of *wine* it has been successfully employed in the latter class of disease, and according to Dr. Rush's authority, "should be given in quarts, and even in gallons daily." Mr. Carrie reports a case of tetanus cured in the Liverpool Infirmary "by drinking nearly a quarter cask of Madeira wine." In chronic Diarrhœa, or where there exists great feebleness of the vital powers, either from age, or as the consequence of acute, but subdued disease, the red wines constitute an agreeable

and effective form of administration for the remedy. To such cases the red Port wine seems peculiarly adapted from the larger proportion of tannic acid which it contains (probably derived from the husks and seeds of the grape which are allowed to remain during the process of fermentation) and from its consequently greater astringent action upon the relaxed animal fibre.

In that terrific malady of drunkards, Delirium Tremens, the physicians judgement has, perhaps, too frequently yielded to the insatiate cravings of the miserable inebriate, and he has continued to prescribe, though in more limited portions, the same fiery excitant which has already turned his stomach into a furnace, and his brain into a Bedlam, under the apprehension that without it, a dangerous collapse would supervene and the wretched sufferer sink. Such fears, however, we regard as without sufficient foundation, and in 99 cases out of 100 which occur, we believe, with Prof. Dunglison, that alcoholic excitants "are by no means indispensable, and the disease admits of cure without the use of any of them." Hundreds of those who within the last ten years have been safely rescued, by the temperance pledge, from the vortex of ruin, and who ceased their stimulating potations, *suddenly and forever*, in the midst of the horrible sequelæ of a debauch, with a blazing stomach and a frenzied brain, amply sustain the correctness of this professional opinion. This temporizing mode of treatment, we are glad to learn, is losing favor with many scientific practitioners, and even the stimulus of *wine*, in the language of Pereira, "is much less frequently and copiously employed, than formerly." While, therefore, we believe, that prescribed under the decision of a discriminating judgement, and guarded by the imposition of suitable restraints, these stimulating liquors may be made subservient to the purposes of the profession, yet in accordance with the expressed view of some of the ablest and best physiologists and chemists of the age, we cannot but regard *every fluid of alcoholic impregnation to be unnecessary or absolutely pernicious in a state of health*—its dietetical use, therefore, as calling for the discouragements of the profession, and even when medicinally employed, as requiring much care and circumspection, lest greater evils be entailed upon the patient, than it purports to cure. In short, in relation to the volatile spirit of which we treat, we are constrained to adopt the language of Dr. A. T. Thompson, viz:—"it is a *medicine*, or a *poison*, according to the discretion or moderation with which it is used, and the skill and judgement which direct its medicinal employment."

ITS EXTERNAL USE.—The decided and powerful impression made by Alcohol upon the living tissues, both by a dynamical and chemical action, gives it some claims to the attention of the profession as an external application. Its utility as a *lotion* in some forms of cutaneous disease, as a *collyrium* in ophthalmia, as a counter-stimulant upon the chest, or upon the umbilical and hypogastric region, to excite respectively the action of the heart, the uterus, or the bladder, in a debilitated or atonic condition of either of those organs, probably depends on its dynamical activity, by which we mean its capability to exert a strong influence upon the animal organism, without effecting any *mechanical* or *chemical* changes in the tissues. Guided by our own experience, however, we deem it proper to say, that when employed by way of warm embrocation for the above purposes, or in cases of feeble circulation or an asthenic condition of the extreme vessels—childblains, &c. &c., its volatile nature, aided by an elevated temperature, will result in such rapid evaporation from the exposed surface, as materially to counteract its excitant properties, and even make questionable the propriety of its use, unless the consequence be avoided by making the friction *under cover*, enveloping the parts in *warm flannel* &c., precautions which should not be neglected. But in cases of hyperæmia of the dermoid surfaces, where the engorged and distended capillaries cannot propel their languid contents, and local inflammation supervenes, as in erysipelas, or severe sprains, or in burns, or scalds. (where the cuticle remains sound,) upon the same principles advocated by Mr. Kentish in his “*Essays on Burns*,” *hot alcoholic frictions* give tone to the feeble vessels, contracting their calibre, and relieving their engorgement, while the process of evaporation which ensues continues to favor these desirable results, and leaves an agreeable sensation of coolness upon the surface. Perhaps, however, its most valuable properties as a *styptic*, in restraining hæmorrhages from weak parts, are attributable to its chemical action upon the albumen and fibrin of the blood, in the production of a coagulum which mechanically checks its flow from the relaxed vessels. Its well known action in hardening the cuticle in the case of tender *nipples*, where the repeated application of ardent spirits for a few weeks before the close of pregnancy, secures freedom from soreness when lactation commences, is probably dependent also upon a chemical change effected in the dermic tissue.



THE PHYSIOLOGICAL AND PATHOLOGICAL PHENOMENA consequent upon its administration.—The extent of our foregoing remarks upon its *external* use, has necessarily led us to anticipate in some degree, the physiological action of our agent, and yet something more must be said, before its effects upon the internal organs can be well understood. For our general views on the *MODUS OPERANDI* of *poisons* upon the animal system, the reader is respectfully referred to the *first* article in the Southern Medical and Surgical Journal for January, 1846. At no distant day in the history of the profession, the action of stimulants, narcotics, and other powerful and poisonous articles of the *materia medica*, was attributed exclusively to the sympathetic transmission of their several peculiar impressions to remote organs through the medium of the nervous tissue.

The progress of physiological and chemical science, however, has completely unsettled these theoretical views, and after a deliberate survey of the whole field of argument, we are still constrained to adopt the sentiments advanced in the article of the Journal above referred to, viz: "While, therefore, we could hardly feel justified in unequivocally denying the sympathetic action of *all* poisonous agents through the nervous tissue alone, yet we must regard the burthen of facts and experiments as opposing the existence of such action, while their *venous* distribution has been established in many instances beyond question." Without therefore admitting or denying the propagation of the alcoholic impression by nervous impulse, it is sufficient for our purpose to say that Alcohol is in many instances, and beyond the possibility of doubt, absorbed and circulated through the sanguiferous channels, and that most, or all of the phenomena attendant upon its use may be readily solved by this authenticated view of its action.

One striking and uniform consequence, resulting from a free indulgence in intoxicating potations, cannot have escaped the most careless observation:—I mean the *high* animal *heat*, accompanied by great muscular relaxation and enervation, after the first stage of excitement has passed away. These phenomena, we humbly conceive, are attributable to the *absorption* and subsequent *decomposition* of the fluid in its passage through the arterial tubes, where its *Carbon* and its *Hydrogen*,—both *positively* electrified elements—coming in contact with the *Oxygen* of the blood—a highly *negative* principle, which has reached the current of the circulation through the cellular structure of the lungs, enter upon a vigorous chemical combination

with it, when by a sort of *slow combustion*, *carbonic acid* and *water* are produced; the *same result*, only attended with less vivid phenomena, which would follow were these elements (i. e. Carbon and Hydrogen) allowed to combine with Oxygen at an elevated temperature in the *open air*. Adopting the luminous and satisfactory views of the Professor of Giessen upon this subject, we believe that the vital forces necessary to supply the *increase of mass*, and to maintain the *voluntary* and *involuntary* motions of the human body depends upon the continued metamorphosis of the organic tissues effected by the combination of the circulating Oxygen of the blood-globules with the carbonaceous matter of those tissues, and in the normal condition of the corporeal functions, always accompanied by the extrication of heat. But in the case before us, the alcoholic elements, i. e. Carbon and Hydrogen seize upon the absorbed Oxygen, intercept its passage to the animal tissues, converting, perhaps, (for the time being) the whole of it into Carbonic acid and water, necessarily evolving heat in ample abundance, as is indicated by the hot skin and bounding pulse of the saturated toper, but accompanied by languor and inaction throughout the whole muscular system, for want of the renewed supply of vital force, which the Oxygen, if undiverted, would have furnished by the healthful transformation of the elementary constituents of the tissues.

**ITS PATHOLOGICAL PHENOMENA.**—The intemperate use of a stimulant so powerful and so diffusible, might well be expected to make wide and signal ravages upon the human constitution. Nor can it be otherwise; and accordingly the established and prolonged habit of inebriety, leaves scarcely one organ or tissue of the whole physical man, unimpaired and normally active.

It wages a perpetual war with life, whether under vegetable or animal organization, and in the *latter*, the very inflammation which it engenders, and the tumult which it excites, is but the consequence of the prompt and vigorous attempt of the *vis conservatrix naturæ*, or the aroused vital powers to resist the inroads of the desolating intruder, and repel its chemical attack upon the invaded tissues. In regard to its hostility to *vegetable* life, we need only remark that arsenic is scarcely less speedy and fatal in its action upon animals, than Alcohol upon the vitality of plants. It acts like Hydrocyanic Acid, but while, in an experiment reported by Mr. Griffiths of the Medical College of St. Bartholomew's Hospital, "Beans were killed by Prussic Acid in the course of a *single day* and deadly Nightshade in *four days*," the

"Spirit of Wine killed the plant to which it was applied in a few hours."\* It shall be our province, however, briefly to notice its pathological effects upon the animal organism.

**STOMACH.**—Repeated potations act upon this organ by obtunding its sensibilities—altering its structure—inducing a state of sub-acute inflammation, and in some instances a "scirrhus condition of the pylorus," followed by repeated eructations, Pyrosis, and *Dyspepsia*, with all the category of morbid and distressing symptoms which follow in its train. A *post mortem* examination, after poisoning with Alcohol from a *single* debauch, sometimes exhibits a natural state of the stomach, but "in animals killed by Alcohol, Orfila says he found the villous coat of the stomach constantly of a cherry-red color"—a statement confirmed by Dr. Christison's experience.† In one case, however, reported by Orfila, after 6 drachms of Alcohol had resulted in the death of a dog, his stomach presented "many longitudinal streaks of a darkish red color, formed by blood extravasated between the two membranes."‡ Mr. Brodie's examinations also "demonstrate a visible inflammation of the stomach."§ In old drunkards the mucous membrane of this organ "is often injected and thickened."||

**THE LIVER.**—The crippled and deranged condition of the great central assimilating organ of the animal economy, the stomach, could not otherwise than result in the propagation of diseased action to the most remote organs, if from no other cause than the defective chymefaction of its ingesta and the consequent impoverishment of the blood. But more than this:—The repeated draughts of ardent spirits, swallowed by the dissipated—long faithfully resisted by the lacteals and absorbents of the stomach and duodenum, at length overcome their declining powers of repulsion, break over the barriers, which active vitality had opposed, and the alcoholic principle makes its way through the current of the circulation, and comes in contact with the structure of every organ; for in such cases the circulating oxygen of the blood-globules cannot decompose the whole of this burning tide, and it has therefore been detected as unaltered Alcohol in the various tissues and serous cavities after death. Under its stimulating contact, then, the *liver* becomes first *functionally* deranged, elaborating a deformed, thick, pitchy, secretion, instead

\* Chemistry of the Four Seasons, p. 83.

† Christison on Poisons's, vol. ii. p. 732.

§ Orfila on Poisons, p. 347.

‡ Orfila on Poisons, p. 341.

|| Pereira M. Med., vol. i. p. 321.



of healthy bile—then undergoes *structural lesion*, and becomes tuberculous and enlarged in volume. I was several years ago permitted to examine, after his death, the liver of a reputed drunkard. Instead of presenting the smooth surface, and chocolate hue of the healthy organ, and weighing 5 or 6 lbs., the whole parenchymatous mass was disfigured by large bluish-white protuberances, completely disorganized and indurated, and weighed, I think, between *seven* and *eight* pounds.

THE BRAIN—is also the seat of great physical and mental disturbance from the action of our poison. Supplied with large bloodvessels and highly excitable, this great central organ of the nervous system is subjected, under the powerful stimulus of intoxicating drinks, taken in *large quantities, suddenly, or within a short space of time*, to profound coma, engorgement of its larger vessels—increased vascularity in the membranes, effusions of serum and the extravasation of blood into its ventricles—presenting every variety of functional aberration, from the most stupid and revolting idiotism, to the most wild and furious paroxysm of Delirium Tremens. While, in long continued habits of intoxication, the whole medullary mass of the encephalon loses its natural softness and elasticity—so indispensable to the highest activity and loftiest efforts of mind—becomes more firm and unyielding, and if the unhappy victim of his cups is not carried off in some drunken fit, corresponding mental and moral phenomena soon manifest themselves. A growing insensibility to the dearest interests and kindest sympathies of life, and an evidently increasing languor and imbecility in his intellectual operations, followed by a soulless apathy and a stolid indifference to all the claims of earth and heaven—are the miserable sequellæ of his unrestrained sensuality. To give plausibility to these deductions, let it be remembered that the action of our agent upon the entire cineritious and medullary matter of the brain, is so well understood by every anatomist, that the organ when designed for dissection is removed from the cranium and immersed for a day or two in a dilute solution of Alcohol, to give greater consistency and firmness, preparatory to the use of the scalpel. Again, its stupefying, deadening power upon the nervous tissue, impairing or destroying its irritability, and thereby preventing its healthy functional manifestations, either in the branches applied to sensation or motion, has been satisfactorily tested by a variety of experiments. Fontana found that when half the body of a leech was plunged in spirit, this part lost all motion, whilst the

other half continued in action.\* The same experimentalist ascertained that plunging the heart of a frog "into spirit caused its motion to cease in 20 seconds." Turtles were killed by its administration either through the stomach or anus, or when introduced under the skin, "before death the animal became motionless:—and applied to the heart of these animals it destroyed the contractility of this viscus.† Monroe applied alcohol to the hind legs of a frog and found the pulsation of the heart to become less frequent, and sensibility, as well as mobility to diminish. Administered by Flourens, to birds, it resulted in the loss of their "senses and intellectual faculties." Again, the reduction of functional capability in the nervous system under the action of alcohol, is exemplified in the fact, that any portion of that exceedingly delicate and sensitive tissue, so readily excitable in its normal condition by the powers of the Voltaic pile, when soaked in alcohol, loses all susceptibility to Galvanic impressions. Now the cerebral mass is but the *radix*—the medulla oblongata and the medulla spinalis—the *trunk*, and the multifarious nervous distributions—the *branches, of one continuous growth* whose chemical constitution may be regarded the same, and whose physiological relations are ever in harmony. The elementary vital manifestations, therefore, made in one part of this great system, may be regarded as characteristic of the whole. All the forms of human power and activity—intellectual life, sensation and consciousness, are, in the language of Liebig, "dependent not only on the *existence*, but also on a certain *quality* of the *substance* of the brain, spinal marrow, and nerves; insomuch," continues he, "that all the manifestations of the life or vital energy of these modifications of nervous matter, which are recognized as the phenomena of motion, sensation or feeling, assume *another form*, as soon as their composition is *altered*."‡ No wonder then, that the presence of Alcohol in the brain should signally modify or change the functional manifestations of that organ, and propagate its own de-vitalizing impression along the nervous cords.

The only question, then, it seems to us, now is—Can Alcohol, by venous absorption, enter the circulation and be detected in the brain, or other remote organs? The advocates of Solidism have for years pertinaciously resisted the force, or avoided the point of accumula-

\* A *Treatise on the Venom of the Viper*, translated by Skinner. See Pereira, vol. 1. 317 p.

† See Pereira, vol. 1, page 317.

‡ Liebig's *Animal Chemistry*, p. 26.

ted facts which have long since amply warranted an affirmative answer to this interrogation.

Without entering upon the defence of the *general subject* of venous absorption, we content ourselves with the exhibition of a few facts illustrative of its truth in the history of the agent under investigation. Dr. Cook, (on the authority of Mr. Carlisle) in his "Treatise on Nervous Diseases" says that, "a few years ago, a man was brought dead into the Westminster Hospital, who had just drunk a *quart of gin*, for a wager," and upon examination, "within the lateral ventricles of the brain was found, a considerable quantity of a limpid fluid, distinctly impregnated with gin, both to the sense of *smell* and *taste*; and even to the test of *inflammability*." This case has been reported by Eberle, Pereira and Christison, the latter of whom (a patient and scrupulous enquirer after truth,) at first, for physiological reasons, questioned the correctness of Mr. Cook's observation upon the subject of the *inflammability* of the fluid found, but has since, in his own experience had ample cause to admit it, and has done so.

Dr. Ogston, in the Edinburgh Medical and Surgical Journal, vol. 40, p. 282 et. seq., "adverts to an instance in which after death by drowning, during intoxication, he found in the ventricles, nearly *four ounces* of fluid, having a strong odor of *whiskey*."\* Dr. Wolffe reports another case when from the surface as well as the ventricles of the brain, a strong smell of *Brandy* was inhaled. The late "experimental researches" of Dr. Percy, however, confirmed by Dr. Christison, go to put the question of the venous absorption of Alcohol and its detection not only in the brain, but throughout the whole animal system, *forever* at rest. Dr. P. found it "in the *blood* of animals to whom he had administered it."† Also in the *urine*, in the *bile*, and in the *liver*. And in the case of "a man who died during the night after drinking a bottle of *rum*, he detected it "in the *urine* and also in the *brain*, by cautious distillation, and removing the water from the distilled fluid by means of dry carbonate of potass." Dr. Christison adds, "Dr. Percy gave me an opportunity of verifying his results with the brain of the man, and I had no difficulty in obtaining from a few ounces of brain a sufficiency of spirit to exhibit its *combustion* on asbestos repeatedly."‡ After these interesting cases to

\* See Christison on Poisons, Part 2nd., p. 733.

† Pereira Materia Medica, vol. 1, p. 320.

‡ Christison on Poisons—Part 2d 734 p.



report in detail the facts related by different writers, in which congestions of the arachnoid membrane, effusion of serosity, and extravasation of blood in the ventricles of the brain, and even the laceration of some of the lobes, is deemed superfluous.

From the extensive survey which we have been led to take of the action of Alcohol upon the animal organism, in our investigation of its influence upon the important organ, the Brain, we feel constrained to study brevity in the remarks which are to follow.

**THE HEART.**—The muscular contractility of this solitary, but central organ of the circulation, excited by the stimulating tide which passes through its cavities, charged with suspended Alcohol, labors with increased vigor to hurry it onward—swelling the arterial tubes and giving a bounding pulse and bloodshot eye; or under large and sudden draughts whose narcotic effects reach the whole nervous centres, suffers the entire destruction of its irritability—ceases to contract or dilate, and death ensues.

**THE LUNGS.**—The blood circulating through the pulmonary tissues, by its alcoholic impregnation, irritates the delicate membrane which lines the air cells, induces a free secretion from its mucous surface, excites cough and throws off a large quantity of inflammatory (?) vapor, strongly charged with the odor of spirit—or, in some cases may superinduce an apoplexy of the organs, likely to terminate fatally.

**THE ABSORBENTS,** too, under the long-continued use of this deleterious beverage, lose their tone and their consequent activity, and fail to perform their accustomed functions. The balance between the absorbent and secernent systems, being thus destroyed, serous effusions take place in the cellular tissue or in the thoracic or abdominal cavities, and all the horrors of Dropsy—pale, swollen dropsy, haunt the inebriate to his grave.

But enough of these detailed views of the pathological effects of our poison. A few words as to its **ANTIDOTAL TREATMENT**, and we are done.

When comatose or asphyctic symptoms have come on from deep drinking, the prompt use of the *Stomach pump* is not only advisable, but, perhaps, indispensable, as, in cases of poisoning by narcotico-acrids, such as Alcohol, Opium, &c., the obtunded sensibility of the gastric surface seems unimpressible by emetics, and the contained fluid (much of it perhaps yet unabsorbed, should the physician be called in at an early stage of these symptoms) can be removed readi-

ly in no other way. If this, however, is quickly done, the stupor sometimes rapidly disappears and the patient recovers.

Dr. Christison reports the case of a boy who had been insensible for two hours before he was called to visit him, from having swallowed a large quantity of raw whiskey; when under his direction, "the stomach pump was immediately applied,—brought away a large quantity of fluid with a strong spirituous odor, and he recovered his senses in fifteen minutes, but remained very drowsy for the rest of the day."\*

When consciousness is not then restored, the regulation adopted by the Edinburgh Police in such cases, viz., the injection of *cold water* into the *ears*, is often powerfully instrumental in effecting the object. It is recommended, however, with confidence, only when the head is preternaturally warm, and the body not too cool.

The secondary stage of reaction which sometimes ensues, must be treated as its violence seems to require, but generally with antiphlogistic remedies. Happy is that physician whose sensibilities have never been shocked by professional calls to these self-sacrificed victims of sensualism, and thrice happy he whose clear head, and calm heart, have never been disturbed by the wild throes of a Bacchanalian revel.

---

#### ARTICLE VI.

*Irritation of the Spinal Marrow and Ganglia of the Sympathetic Nerve, with Cases.* By W. F. BARR, M. D., of Greenville, Tenn.

Whilst there are such works extant as those of Marshall, Teale, and others, on diseases dependent upon irritation of the spinal marrow, it may appear superfluous—a work of supererogation—to some, to say any thing more upon the subject, or take up the pages of a medical journal in the publication of cases. Although this subject may be very familiar to *some*, and although the works referred to have been so long published, yet I have been surprised to find so many in the profession who are entirely ignorant upon the subject. I find many—graduates and those who are not—who *never* refer to the spinal marrow, either as the origin or modifier of diseases. When we reflect that the nerves are distributed throughout the whole

---

\* Christison on Poison, Part 2, p. 730.

system—that there is not a part but is under their influence, and that these nerves originate from the brain and spinal marrow, it is a matter of great surprise that so little attention has been, and *yet is*, paid to the subject.

It is quite common for physicians to make but a slight examination of their patients. Is there pain in the head, and delirium,—then, of course, the *brain* or its *membranes* are *inflamed*! Does a patient complain of pain in the right hypochondrium and shoulder?—here is a case of *inflammation of the liver*! Is there pain and tenderness in the abdomen?—this is a case of *inflammation* of some membrane of the intestines! If there be *pain* and *tenderness* in any part, it is immediately pronounced to be *inflammation* of the part! I have had, and now have, under my care, cases of two, four, ten, and *twenty* years standing, which have been considered chronic hepatitis, gravel, &c.

The means by which we ascertain the existence of irritation of the spinal marrow, &c., are pressure, percussion, and the application of a warm sponge, upon each *vertebræ*.

The symptoms vary according to the particular part of the spine that is affected. There is either acute or obtuse pain in the scalp; stiffness in the neck; pain, numbness, prickling and creeping sensations, and often a sensation as if cold water was running over the part are felt in the extremities and shoulders; the arms, hands, fingers, legs and feet sometimes become so benumbed that they feel enlarged. When the pains are acute, they become *intermittent*, which is an evidence that the disease is *nervous*.

In cases of neuralgia of the bladder and kidneys, the *nervous excitement* sometimes becomes so great as to cause an effusion of blood, and the urine will be found tinged with it. In cases of bowel affections, the discharges will sometimes become frequent, painful, mucous and tinged with blood, and the abdomen will become tympanitic and tender. These circumstances are apt to influence us to believe that inflammation does really exist. But we must make the *true* character of the disease our guide. In some cases of neuralgia of the head we will find redness of the eyes, intolerance of light and sound, and, during the paroxysms, violent delirium.

By close examination we will find cases of angina pectoris, palpitation of the heart, hysteria, flatulence, colic, dyspepsia, gastralgia, pyrosis, hysteralgia, dysmenorrhœa, and *supposed* cases of phrenitis, arachnitis, hepatitis and pneumonia, depending entirely upon irrita-



tion of the spinal marrow and ganglia of the sympathetic nerve; and I would add, as I have found them, supposed cases of rheumatism, white-swelling and *gravel*.

I make it an invariable rule, whenever called to a patient, to examine the spine as carefully as I would the pulse. I care not what the disease is, or what it may be called by others, *this I never neglect*.

CASE 1. *Intermittent Fever*.—Some, I have no doubt, will be rather astonished to find, among cases dependent upon *spinal irritation*, a case of *intermittent fever*. But to others (those who have attended the Lectures of Dr. Ford, of the Georgia Medical College) it will not be a matter of so great astonishment. However, I believe the doctrine: for it was satisfactorily proven by Dr. F. in his lectures, and my *own* experience has also established it—at least in my view. I will give only one case, though I could give many, both of remittent and intermittent fevers.

S. B., æt. 10, was confined with intermittent fever. I was sent for to see him, as soon as I could. In an hour or two I saw him. The chill had passed off, and the fever pretty high. Among other symptoms, found the dorsal vertebræ tender. Prescribed a purge of pills, sinapism to spine, and left quinine to be given when exacerbation had abated. After the pills had operated, and the sinapism had irritated the skin, the patient felt so much better that the parents were induced to postpone the administration of the quinine. He chilled no more, and recovered without the aid of any other medicine.

CASE 2. Miss N. S., æt. 14, had been attacked, about fifteen months previously to my being called in, with intermittent fever. Since then she had been afflicted with what she called "*bad spells*," during which she would fancy she saw ghosts, witches and hobgoblins! She would have nine or ten of these "*spells*" every day. When first taken, her face would become very red when the paroxysm was on; but towards the last, her face would be very pale. During the paroxysm, she could not speak, nor work at her sewing or knitting; she would think old witches were throwing ashes at her!—though when the paroxysm was off, she said she knew it was all imaginary.

Application had been made to four different physicians, and she had taken medicine for twelve months, but was not relieved. When her mother spoke to me about her situation, I remarked I could cure her—but she refused to take any medicine, as she had taken so much

and found no relief. As I did not wish her to take much *internally*, she agreed to place herself under my care. As she had had intermittent fever, I felt satisfied the disease was owing to spinal irritation, and in this I was not mistaken. The lower dorsal and the lumbar vertebræ were found to be tender. I gave her a dose of purgative medicine, and applied ung. tart. antim. to the spine. So soon as pustules made their appearance, she was cured. It has been about two years, and she has felt no symptoms of the disease since—and she says she is not now, as formerly, haunted by witches and ghosts!

CASE 3. I was called to see, in great haste, a negro man belonging to D. H., Esq. He had got wet a few days before, and when taken, the pains in his breast were so violent as to cause him to scream out loud enough to be heard several hundred yards. I found him in this situation: violent pains throughout the chest—especially through the mediastinum; tongue but slightly furred; and pulse nearly natural. The pains were intermittent, and he was compelled to lie on his back—for he said it would kill him to lie in any other situation, or to move. His young master, who was then studying medicine, accompanied me to see him. After asking the boy a few questions, the young gentleman asked me what I thought was the disease. I remarked, it was dependent upon irritation of the spinal marrow. We turned the boy on his side, as easily as could be done, and the cervical and dorsal vertebræ were very tender. The least pressure would cause insupportable pain. I prescribed a dose of purgative pills, and a blister to the spine. This was at night. On next morning, he was walking about, and nothing else was done, only he was told to take a dose of salts.

CASE 4. I was requested by Mr. S., to visit his wife, whom he said had been afflicted with Dyspepsia, for nearly three years. I visited her, and she informed me of her situation. About three years, previously, she was taken with a violent pain in the stomach, flatulence, pyrosis, and the general symptoms of dyspepsia. She had taken medicine from several physicians, who considered her disease dyspepsia, but she found no relief, in fact, she said she got worse. She now, complained of pain in the right hypochondrium. Upon enquiry, I found the pains in the stomach and liver, were intermittent. Upon examination, the cervical and upper dorsal vertebræ were found to be very tender. I then informed her, she had neither dyspepsia nor inflammation of the liver! but all her suffering was owing to irritation of the spinal marrow and ganglia of the sympha-

thetic nerve. I prescribed the compound tincture of Iodine internally, and the spine to be kept irritated with ointment, composed as follows :

|                                 |      |
|---------------------------------|------|
| Iodide Potassium, . . . . .     | 3i.  |
| Iodine, . . . . .               | 3i.  |
| Ungt. Hydrarg. Fort., . . . . . | ʒss. |

In a few weeks she was well.

CASE 5. *Numbness of the arm and hand.*—I was requested by a lady to give her something to cure her arm, which she said had been numb for several days, her fingers felt enlarged. I examined the spine, and found the cervical vertebræ tender. Prescribed purge, and blister upon the back of the neck ; which cured her.

CASE 6. *Irritation of the dorsal and lumbar vertebræ, simulating cystitis, nephritis, peritonitis, and enteritis.*—I was requested to visit Mrs. ——. Tongue healthy appearance ; pulse natural ; she complained of pain in the fundus of the bladder, and the corresponding portion of the abdomen was very tender. The desire to urinate was frequent, but the discharge was small, attended with pain, and of a deep red color, on several occasions it was tinged with blood. The lumbar vertebræ were tender. Gave purge, and applied a blister to the spine. In a day or two she considered herself well, and went to church, and on her return she got her feet wet. On next day, the pain in the bladder returned, with pains in the abdomen and kidneys. The abdomen was slightly swollen—the desire to urinate was frequent—the quantity small, and on several occasions tinged with blood. The dorsal and lumbar vertebræ were tender. Gave purge ; applied blister to spine. This seemed to give but little relief. I then prescribed ext. stramonium : she was soon narcotised with it, but no relief. I then narcotised her with acetate of morphine. No relief yet. The bowels now became very painful, the abdomen tympanitic and tender ; the stools were frequent, painful, mucous and tinged with blood. From all these circumstances, I was induced to believe inflammation existed ; but in this I was mistaken. The swelling of the abdomen diminished in half an hour, under the application of warm fomentations. I reapplied the blister to the spine, and—as the patient said she would *die* before she would take any other medicine—I consented for her to take a dose of *salts* ! After the blister drew, and the salts operated, all the pain and soreness of the abdomen, kidney and bladder, were relieved. I then used ext. belladonna, until she was narcotised. Her recovery was then rapid.



CASE 7. Mrs. —, was attacked with neuralgia of the scalp. Cervical vertebræ tender. Prescribed, purge, blister to the tender vertebræ, and extracts of belladonna and stramonium in combination, until vertigo was produced. She did not recover, until she had been narcotised three times. The narcotics were given in doses of one-quarter of a grain each every three hours, until vertigo was produced, at which time they were to be discontinued, but to be resumed so soon as this disappeared.

CASE 8. *Hysteria, numbness in extremities, flatulence, &c.*—The patient, Mrs. D., was confined to her bed with hysteria. During the day she complained of flatulence, and she was very much annoyed by a creeping sensation in the right groin; this would continue during the morning, but in the afternoon would cease, when she would have pain in the right hypochondriac region, or in the right leg. The tongue was slightly furred, with disagreeable taste in the mouth; pulse small, quick and weak; bowels constipated; pain in the head; the desire to urinate somewhat frequent; but the quantity was small, (and sometimes only a few drops would be discharged,) which was attended with severe burning heat, and some pain. When the medicine operated upon the bowels, the same sensations attended the discharges. At night she would have a hysterical paroxysm. She had on a former occasion been attacked with (as she was told by a physician,) "*the gravel.*" For three or four years she had been subject to numbness and obtuse pain in the shoulders, arms and legs. On several occasions, she lost the use of her right arm. Owing to having pain in the right hypochondrium and right shoulder, she was said to have the "*liver complaint.*"

It was with difficulty I induced her to abandon her notions of being afflicted with "*gravel*" and "*liver complaint.*" Upon examination, I found the cervical and lumbar vertebræ slightly tender. I prescribed a purge, and a blister to be applied to the tender portions of the spine—laudanum and ether, to be given on approach of paroxysm. After the blister drew, she had no more paroxysms, but the creeping sensation in the groin, pain in the right hypochondriac region, and the disagreeable sensations attending the discharge of urine and feces remained. To keep the bowels open, gave pil. hydr. The patient was then put upon the use of the comp. tinct. of iodine internally, and after the blister healed, to keep the spine irritated with the ointment, according to formulary in case 4. With the use of these remedies she began to improve, until the creeping in the

groin, pain in the side returned only on every Monday. In every other respect, she had entirely recovered. To prevent the periodical occurrence of these symptoms, sulph. quinine, in doses of 5 grains three times a day, was given. This had the desired effect. She is now well.

CASE 9. I was called out at night to attend a negro woman, who it was said was in labor. Soon after my arrival, I found the pains occurring frequent and regular; and the old woman said the child would be born in a few minutes. After a close examination, I found the pains to be *false*. I then examined the spine, and found the lumbar vertebræ very tender. She was surprised, and would not believe me, when I informed her she would not have a child in less than two weeks—which would be the time for delivery, according to her *reckoning*. Gave purge, and applied blister to the lumbar vertebræ. She recovered, and in about two weeks I delivered her of a fine child.

CASE 10. Mrs. W., about six months advanced in pregnancy, complained of violent cramping pains in the stomach. They were intermittent. The whole of the spine was very tender. Gave purge, and applied a blister to the whole length of the spine. Laudanum, 30 drops every half-hour, until relieved. Under this treatment she recovered.

CASE 11. Mrs. H., æt. about 50, complained of flatulence, colic, numbness, prickling sensations, and dull pain in the shoulders and extremities; pain in the right hypochondriac region. She had been under medical attention, on several occasions, for chronic hepatitis, which had now existed for *twenty years*! The whole length of the spine was very tender. In order to dissipate her gloomy feelings, at the thought of having the "*liver complaint*," as she was quite an intelligent old lady, I informed her of the true nature of her disease.

Mild laxatives, (Dewees's laxative pills,) comp. tincture iodine, and the ointment according to formulary in case 4, to irritate the spine, were prescribed. Under this treatment she had so rapidly recovered, as to pronounce herself well. But as the spine was yet somewhat tender, I requested her to continue the medicines a short time longer,

CASE 12. Mrs. E. F., the mother of two children, informed me, while attending upon one of her children, that she had "*sick spells*" very often, sometimes every day. When attacked, she would be sick at the stomach, have swimming in the head, &c., and she

would be compelled to sit down, or she would fall. She also complained of pains in the right shoulder, arm, side, leg and foot. The pains in the foot would be at times violent. She was also subject to hysteria. At night she would be afflicted with nightmare. She had, on a former occasion, when complaining of the same kind of symptoms, been treated for hepatitis.

In a few days after she informed me of her situation, she was confined to her bed. She was now entirely helpless, and was so tender she would cry out if touched. The whole extent of the spine was very tender. I prescribed purgatives, and blister to be applied to the spine. This treatment so far improved the disease, as to cause the symptoms to be felt only in the afternoon. I then prescribed sulph. quinine, 5 grains every three hours. Under this treatment she recovered.

CASE 13. Mrs. F., æt. 28. When called to see this patient, she informed me she had been afflicted with the "*liver complaint*" for ten years. She had been under the care of several physicians for this disease, and her case was considered incurable. I found the cervical and dorsal vertebræ tender. Prescribed purgatives, and blisters to spine—under this treatment she recovered.

I have now extended this article to a greater length than I desired, but I hope the reader will be compensated for the time consumed in reading it. Many other cases of *chronic hepatitis, nephritis, calculus*, &c., &c., could be given, but I will not take up more of the pages of the Journal with them.

---

## PART II.—REVIEWS AND EXTRACTS.

### ARTICLE VII.

*Contributions to the Natural History of the Alligator, (Crocodilus Mississippiensis,) with a Microscopic Addendum.* By BENNET DOWLER, M. D. pp. 30. Reprinted from the New Orleans Medical and Surgical Journal, Nov. 1846.

Dr. Dowler is favorably known to the medical world as the author of several original views in physiology. His interesting trains of researches on "Febrile Caloricity," and on the "Post-mortem Contractility of the muscles," have not failed to elicit the attention of



the profession. In the pamphlet before us, the author proposes to give us an outline of the Natural History of the great Saurian of Louisiana. Physicians have always been foremost in the cultivation of the various departments of Natural History; and we are always gratified to observe that the minds of the most gifted are generally directed towards these rich and interesting fields of inquiry. On the present occasion we intend to pass in rapid review Dr. Dowler's "Contributions to the Natural History of the Alligator;" and, if it should be made apparent, that the author, in his zeal to expose and correct the errors of others, has sometimes fallen into mistakes and misapprehensions, it will not be considered as detracting materially from the value of his investigations. A long residence on the coast of Georgia, has afforded me numerous opportunities of observing the habits of this curious reptile, and of making frequent examinations and dissections of it.

Dr. Dowler remarks:—

"That the Alligator is identical with the Crocodile, can scarcely admit of a doubt. Even those naturalist, who have labored most to establish a difference, have admitted directly or indirectly, that there is none of a radical character. As this animal is, nevertheless, modified to some extent by climate, it may be advantageous to adopt names characteristic of the same, or at least, of the locality where this great Saurian is found—as the Nilotic Crocodile, (*crocodilus Niloticus*), the Gangetic, (*c. Gangeticus*), the Mississippi, (*c. Mississippiensis*), and so on. This topographical nomenclature will, for the present, leave the question of scientific classification open, as it ought to be, until vague and contradictory descriptions shall be replaced by exact observations."

It is very obvious from the above, that Dr. D. considers our Alligator to be *specifically identical* with the Nilotic and Gangetic Crocodiles, as he designates the different names which naturalists have bestowed upon them, as a mere "topographical nomenclature." Nothing can be more clearly established in Herpetology, than that the Alligators and Crocodiles constitute *distinct species* of reptiles. Indeed, since the admirable researches of Cuvier, naturalists have made separate *genera* or *sub-genera* of the Crocodiles, Alligators and Gavials. That this classification is neither fanciful nor unfounded, will be manifest to any one who will compare the slender elongated muzzle of the Gavials, with the broad obtuse muzzle of the Alligators. The *specific* distinctions are, of course, less marked, but sufficiently characteristic and constant to constitute *distinct species*.

Accordingly, modern naturalists have established 6 species of true Crocodiles, 6 species of Alligators, and 2 species of Gavials. These specific distinctions will be pointed out more particularly when treating of the dental system of this reptile.

Prof. J. E. Holbrook notes the following characters as *peculiar to our Alligator*, (*Alligator Mississippiensis*), each of which, I have verified by observation and comparison. "Nostrils separated from each other by a long partition; forehead divided by a short, prominent, longitudinal carina; four large tubercles along the neck, arranged in rows on each side of the vertebral line." (Vide. *North American Herpetology*—by John Edwards Holbrook, M. D., vol. 2, p. 53.

Dr. Dowler gives the following description of the dental system of the Alligator:—

"The *upper jaw* is wider than the under, which it overlaps. The latter has forty teeth, none of which are *grinders*, as asserted by Professor Owen—none are cutting or incisor teeth, as they are described to be by Goldsmith. The teeth of the upper jaw are similar in number and structure.

"The Cuvierian classification is based on the teeth, which this author says, 'are for the Alligator, thirteen on each side of the upper jaw. The fourth tooth, on each side of the under jaw, enters a hole in the upper.'

"Professor Edwards, of Paris, in his work on Zoology, (p. 367) characterises the Nilotic Crocodile by its dental organization, but in the very same page, gives these identical characteristics, by which to distinguish the Alligator. Both are recognised by the fourth tooth, one on each side of the lower jaw, as entering sockets in the upper; an excellent example of a distinction without a difference, not unlike Shakspeare's two lovers:

'Two *distincts*, division none.'

"Professor Owen, of London, is quoted in the *British and Foreign Medical Review*, for January, 1846, as maintaining, in his recent work on Odontography, that 'the Crocodile has as many as four generations of *molar teeth*.' Buffon's account of the teeth agrees with Cuvier's. Geoffroy St. Hilaire, naturalist to the Egyptian Expedition, enumerates 36 in the upper, and 30 in the lower jaw, all of which, according to his engraving, (pl. 2, *croc. vulg.*) are long and conical. Now, the facts are these: in both jaws there are 80 teeth, nearly half of these, that is 36 or 38, are short blunt teeth, rising but little above the gum, wholly different from grinders—never being worn—occupying the interspaces between the long conical teeth, which latter amount to 42 or 44, and are round, white, polished, tapering, salient, and project from the gum nearly an inch, usually exceeding a quarter of an inch in diameter. As the lower jaw is less expanded than the upper, its long teeth, 20 to 22 in number, are re-

ceived, not only within the dental range of the upper jaw, but *fit into as many holes in the latter*. Instead, therefore, of two long teeth fitting into two sockets, there are never less than 20 long teeth fitting into as many sockets in the roof of the mouth—an arrangement which totally prevents the possibility of using grinders, did any really exist. Moreover the teeth of the two jaws are not *opposite each other*. Hence, grinders would be wholly useless. It is evident that these, as well as all the other naturalists whose works I have seen, are wrong in every essential particular relating to the dental apparatus.

“Both sets of long, pointed teeth, penetrate plank and wood of all kinds, unless extremely hard. The crushing power of the jaws is *vertical*, not *lateral* or *grinding*. Both jaws present, along their dental or alveolar margins, an undulating or curving line, which, in the Nilotic Crocodile, seems more salient, if I may judge from the engravings of St. Hilaire, and a few others. The teeth correspond to this undulation, as does one jaw to the other. The general bearing of this line is several degrees above the horizon, commencing at the muzzle, and running backward to the posterior angle of the mouth. The form and situation of the dental organs, together with the osteological configuration of the jaws, render *grinding* operations quite impossible. The animals found in the stomachs of Alligators, examples of which will be given, show that their prey is killed by penetrating bayonet-like wounds, and are swallowed without mastication. The crushing and prehensory power of the jaws and teeth, is as remarkable as it is unquestionable.”

The above paragraphs afford a curious and instructive illustration of the confusion produced by the assumption of *erroneous premises*, and of the false deductions which flow therefrom. As we have previously shown, Dr. Dowler sets out with the erroneous assumption that the Crocodile and the Alligator are *specifically identical*, and he forthwith detects a number of differences between the specimens of the Alligator before him, and the descriptions of the African Crocodiles given by distinguished naturalists. Dr. D. is correct in his descriptions, and so also are Geoffroy St. Hilaire and Cuvier:—but they are describing *different reptiles*. Justice demands that some notice should be taken of the charge which is brought against Prof. Owen, of London, viz: that he asserts that the Crocodile is furnished with *grinders*. It would, indeed, have been remarkable, that so accurate and distinguished an observer,—who is justly esteemed the highest living authority in comparative anatomy,—should have committed such an obvious blunder. The accusation is based upon the following quotation from the British and Foreign Medical Review,—viz: “the Crocodile has as many as four generations of *molar teeth*.” From a careful examination of Prof. Owen’s work on Odontography,



I have been able to discover but one passage relating to this point. It is as follows: "In the Crocodiles there are three and sometimes four generations of teeth, sheathed one within the other, contained in the same socket."—(Owen's *Odontography, or a Treatise on the Comparative Anat. of the Teeth*, p. 187; London, 1840-45.) Here no mention is made of *molar teeth*. But admitting that the term was applied to the dental system of the Crocodile, it by no means follows that Prof. Owen asserted that this reptile is furnished with *grinders*. Naturalists frequently speak of the *molar teeth* of the feline and other carnivorous animals, and yet, "the crushing power of the jaws is *vertical*, not *lateral* or *grinding*." Dr. D. has evidently confounded a dental nomenclature derived from the *situation* of the teeth, with one based upon the *function* of these organs. The teeth situated behind the fourth or large canine tooth, and corresponding in *position* with the true *grinders* of many mammalia, might be appropriately called *molar* by way of distinction. That Prof. Owen is accurately informed in regard to the dental apparatus of these reptiles, will be made apparent in the sequel.\*

Dr. Dowler proceeds:—

"To classify the crocodilian family by its dental organization, is altogether erroneous, so long as the shape, situation, arrangement and number of the teeth are not as yet ascertained. Scarcely any two authors agree in so simple a matter as the number of the teeth. Goldsmith says that there are 27 in the upper and 15 in the lower jaw, and the authors already quoted, all give different aggregates."

Our author is very much mistaken in supposing that very little is known of the dental organization of these reptiles. The illustrious Cuvier did not fail to direct the energies of his gigantic mind to this point. He examined 60 individuals of both sexes, from 12 to 15 feet long, to those just from the egg.—(Vide. *Recherches sur les Ossements Fossiles*, 4th Ed. in 10 vols. 8vo.; Paris, 1836, vol. 9, p. 42.)

\* Since the above was written, the subjoined paragraph in the work of Prof. Owen has attracted my attention. It was doubtless from this passage, that Dr. Dowler gathered the *erroneous inference*, that Prof. O. asserted that the Crocodile possesses *molars* or *grinders*. This will be apparent to the reader, from a perusal of the whole paragraph.

Prof. Owen is treating of the *succession* of teeth in the *mammalia*. The following extract relates to the cases in which the gemmiparous process allows the newly-formed teeth to come up by the side of the parents, as in the case of the 2d and 3d true molars of man:—

"In this successive germ-production, we find repeated the multiparous property of the dental matrix of the crocodile; but the concomitant growth of the jaw allows the 2d, 3d, and sometimes even 4th generation of true molars to co-exist, and come in place side by side. In the unguiculate and most of the ungulate species of the placental division of the mammalian class, the fissiparous repro-

Prof. Owen observes that, the ancient writers on Natural History appear to have been much struck with the great number of teeth in the Crocodile; and their descriptions were exaggerated to the tone of the impressions thus produced. According to Achilles Tatius, the Crocodile has as many teeth as there are days in the year: Alkazuin assigns it 200 teeth; Abuhamed was more reasonable and allowed 80. How many teeth a Crocodile may develop through the whole course of its life in uninterrupted succession will never perhaps be determined—they, then, would doubtless far exceed in number the liberal allowance of Tatius; but with regard to those teeth which are in use in the jaws at any given time, the number is now well established. The Crocodile of the Nile (*Crocodilus vulgaris*) has  $\frac{1}{15} \frac{1}{15} = 68$ ; that of the West Indies (*C. acutus*) has  $\frac{1}{15} \frac{1}{15} = 66$ ; our Alligator (*Alligator lucius*, or *A. Mississippiensis*) has  $\frac{2}{20} \frac{2}{20} = 80$ ; the great Gavial (*Gavialis gangeticus*) has  $\frac{3}{20} \frac{3}{20} = 118$ . Thus the different species and genera of Crocodiles differ from each other in the number of teeth, and also the individuals differ within small limits.—(Vide. Owens's Odontography, pp. 285, 286.) Indeed, the best and most readily recognizable characters by which the existing Crocodilians are grouped in appropriate genera, are derived from modifications of the dental system. In the *Caimans* (Genus Alligator), the teeth vary in number from  $\frac{1}{18} \frac{1}{18} = 72$  to  $\frac{2}{22} \frac{2}{22} = 88$ : the 4th tooth of the lower jaw, or canine, is *received into a cavity* of the palatal surface of the upper jaw, where it is *concealed* when the mouth is shut; in old individuals the upper jaw is perforated by these inferior canines, and the fossæ are converted into foramina. In the *Crocodiles* (Genus *Crocodilus*), the 1st tooth in the lower jaw perforates the palatal process of the intermaxillary bone when the mouth is closed; the 4th tooth of the lower jaw is *received into a notch* excavated in the side of the alveolar border of the upper jaw, and is *visible exter-*

duction of horizontally-succeeding teeth stops at the 3d generation; in other words, they have not more than 3 true molars on each side of the upper and under jaws. In the marsupial series the same process extends to a 4th generation of true or horizontally-succeeding molars; and in most of the species, the 4th true molars are in use and place at the same time; but in the kangaroos, the anterior ones are shed before the posterior ones are developed. This successive decadence is still more characteristic in the grinding teeth of the elephant, which consists exclusively of true molars."—(Vide. Owen's Odontography, p. 308.)

It is obvious from the connection, that Prof. Owen merely *compares* or points out the *analogy* between the successive reproduction of teeth in the mammalia and the crocodile. The "*true molars*" alluded to, have reference to the *former* class of animals, and *not* to the *latter*. This is clear from the fact, that he points out distinctly a remarkable *difference* in the mode of succession of the teeth in the two classes. In the crocodilians, the teeth succeed each other *vertically*, whereas the "*true molars*" of mammalia succeed each other *horizontally*, as is apparent from the paragraph quoted.

nally when the mouth is closed. In the two preceding genera the alveolar borders of the jaws have an uneven or wavy contour and the teeth are of unequal size. In the *Gavials* (Genus *Gavialis*), the teeth are nearly equal in size and similar in form in both jaws, and the 1st as well as the 4th tooth in the lower jaw, passes into a *groove* in the margin of the upper jaw, when the mouth is closed.—(Owen, op. cit., p. 286.) Prof. Owen remarks that, “In all the genera of *Crocodylians* the teeth of the upper and lower jaws are so placed that their points, instead of meeting, *interlock*.”—(Vide. p. 287.) This distinguished comparative anatomist cannot, therefore, be accused of maintaining that these reptiles are furnished with *grinders*, for the dental arrangements which he describes and delineates with so much accuracy, “render *grinding* operations quite impossible.”

To proceed with a more particular account of the dental apparatus of these remarkable reptiles. In all the species of each genus, the teeth are present in the intermaxillary, superior maxillary and pre-mandibular bones, and are confined to these bones, the palate being edentulous. The teeth are relatively larger and stronger in the Alligators and Crocodiles, than in the Gavials; they are almost always conical, and slightly recurved; the crown has generally a sharp border before and behind, and it is longitudinally striated.—(Vide. Owen, op. cit., p. 287.) The subjoined formulæ, taken from Prof. Owen’s work, will exhibit the dental arrangement of *each species*.

|            |                   |  |  |
|------------|-------------------|--|--|
| Alligator  | Mississippiensis, | $\frac{20-20}{20-20} = 80.$                                  | $\frac{4, 5, 6, 9, 10}{1, 3, 4, 11, 12, 13} = \text{largest.}$ |
| “          | palpebrosus,      | $\frac{19-19}{21-21} = 80.$                                  | $\frac{2, 3, 7, 8}{1, 4} = \text{largest.}$                    |
| “          | sclerops,         | $\frac{18-18}{18-18} = 72.$                                  | $\frac{4, 5, 10}{1, 4} = \text{largest.}$                      |
| “          | cynocephalus,     | $\frac{19-19}{18-18} = 74.$                                  | $\frac{3, 4, 9}{1, 4} = \text{largest.}$                       |
| “          | trigonatus,       | $\frac{20-20}{21-21} = 82.$                                  | $\frac{2, 3, 6, 7, 8}{4, 5, 11, 12} = \text{largest.}$         |
| “          | niger,            | $\frac{18-18}{19-19} = 74.$                                  | $\frac{3, 4, 5, 9}{1, 4, 11, 12} = \text{largest.}$            |
| Crocodilus | rhombifer,        | $\frac{17-17}{15-15} = 64.$                                  | $\frac{2, 7}{4, 10} = \text{largest.}$                         |
| “          | Gravesii,         | $\frac{18-18}{15-15} = 66.$                                  | $\frac{2, 7, 9, 11}{4, 9, 10, 11} = \text{largest.}$           |
| “          | vulgaris,         | $\frac{19-19}{15-15} = 68.$                                  | $\frac{3, 9}{1, 4, 11} = \text{largest.}$                      |
| “          | biporcatus,       | $\frac{18-18 \text{ or } 19-19}{15-15} = 66 \text{ or } 68.$ | $\frac{2, 3, 8, 9}{1, 4} = \text{largest.}$                    |
| “          | acutus,           | $\frac{18-18}{15-15} = 66.$                                  | $\frac{4, 10}{4} = \text{largest.}$                            |
| “          | intermedius,      | $\frac{18-18}{15-15} = 66.$                                  | $\frac{1, 5, 10}{1, 4} = \text{largest.}$                      |
| Gavialis   | gangeticus,       | $\frac{30-30}{29-29} = 118.$                                 |  |
| “          | Schlegelii.       |  | (Owen, pp. 287, 288, 289)                                      |



From the period of exclusion from the egg the teeth of the Crocodile succeed each other in the vertical direction; some are added from behind forwards like the true molars in Mammalia. It follows, therefore, that the number of teeth in the Crocodile is as great when the animal first sees the light as when it has acquired its full size; and owing to the rapidity of their succession, the cavity at the base of the fully-formed tooth is never consolidated.—(Vide. Owen, op. cit., pp. 294, 295.) This fact gives additional value to the *dental system*, as a basis of classification in the Crocodilian family; since the distinctions are equally recognizable at *all periods of life*, an advantage which does not obtain in the mammalia.

We have thus endeavored to show, that Dr. Dowler has committed a great error in assuming the *specific identity* of the Alligator and the Crocodile, the differences being so marked, that modern naturalists have made *three* distinct *genera* out of what was formerly termed *Crocodilus*. We have also shown, that there is a striking difference in the dental organization, as well as the general appearance of the several genera and species of this family of reptiles; and that Geoffroy St. Hilaire, Cuvier, Edwards, Owen, and other distinguished naturalists were accurate observers of nature. A mere glance at the plates given by Cuvier in his *Ossemens Fossiles*, and by Prof. Owen in his magnificent work on Odontography (Plates 75 et 75 A.), is sufficient to show that the genera are well-characterized and to place misapprehension out of the question.

There can be no doubt that Dr. Dowler is correct in attributing to Herodotus most of the errors concerning the Natural History of the Crocodile. But in the exercise of wholesome and legitimate censorship, he has sometimes overstepped the bounds of strict justice and propriety. Thus, he says:—

“In the huge folios of Natural History, produced by the French expedition into Egypt, there is an elaborate history of the Crocodile, and which might be entitled, A DEFENCE OF THE ERRORS OF HERODOTUS; by Geoffroy St. Hilaire, naturalist to the expedition. It is doubtful whether any of the *savans* of the expedition saw or examined a Crocodile in Egypt. Certain it is that they have added nothing original to its natural history. St. Hilaire appears to have picked up all his information at the fisheries, from people more likely to deceive him than otherwise.”

This is rather a serious charge to bring against so eminent a naturalist as M. Geoffroy St. Hilaire. It is well known that he made a number of *accurate dissections* of the Egyptian Crocodile, and that he sent many specimens to Paris.

Again, Dr. D. remarks :—

“This able physiologist, lately numbered with the mighty dead, may have excelled his predecessors in certain branches of natural history, especially that portion so peculiarly his own, relating to *Monstrosity*, or the deviations of nature in the animal kingdom, which he has reduced, in a great degree, to order, regularity and harmony. With all his reverence for Herodotus, he sometimes differs from the old Greek, but never when the latter is wrong, and nearly always when he is right. Herodotus says, the Crocodile is truly amphibious; no, says St. Hilaire, not ‘*un véritable amphibie*.’ And how does the French Herodotus prove this? Answer, ye who import facts, philosophy, and logic from Paris—the modern Athens! The Crocodile is not a true amphibium. Hence, says he, it is in a false position among animals! It is unsuited by nature either to live in the air or in the water! Hence, it is never satisfied, and is always restless; and this, says the great naturalist of the expedition, is the reason why the Crocodile is always ferocious, always cruel! And this is the argument of one of the principal *savans*, whose works, otherwise very learned and valuable, have on the title pages the following words: ‘*Publié par les ordres de sa Majesté L’Empereur Napoleon. Le Grand.*’

“Herodotus satisfied St. Hilaire, and St. Hilaire has satisfied the later naturalists, who continue to copy the blunders of the former and the latter, occasionally adding some on their own account, as will be seen hereafter. These errors have increased, are increasing, and ought to be checked, or rather, consigned to oblivion.”

There we have another illustration of the misapprehension growing out of the want of a correct appreciation of the meaning of the terms used. Strictly speaking, *amphibious animals* in modern zoology, are such as are capable of living exclusively either on land or in water: that is, such as possess organs enabling them to *breathe* both elements, or are furnished with gills and lungs conjointly. The Alligator certainly *does not* come under this category; for it breathes air exclusively, and would perish if submerged a sufficient length of time. There is, however, a small family of *perennibranchiate* reptiles which have lungs like the *batrachians*, “so that they may be considered,” as Cuvier observes, “the only vertebrate animals which are truly amphibious.”—(Animal Kingdom. Amer. Trans. New York, 1831, vol. 2, p. 83.) The *Siren lacertina* which inhabits the Southern States, is a reptile belonging to this family. “The simultaneous existence and action of the branchial tufts and of the lungs in these animals, are as incontestable as any one of the most indubitable facts presented to us in natural history.” (Cuvier.) It is very obvious, therefore, that the Crocodile is not “*un véritable*

*amphibie*"; and, consequently, the French *savant* is *right*, and Herodotus and Dr. Dowler are *wrong*.

Our author proceeds to give a minute and correct account of the *tongue* of the Alligator.

"Herodotus declared the Crocodile could move the *upper jaw* only. Pliny copied the statement. 'The Crocodile only moveth the upper jaw or mandible, wherewith he biteth hard. (Holland's Pliny b. VIII.) St. Hilaire is much embarrassed with this statement, which he does not fully admit, and which he tries to explain in a very unsatisfactory way.

"Herodotus denied a *tongue* to the Crocodile. Pliny says, 'the river Nilus nourishes the Crocodile, a venomous creature, as dangerous upon water as upon land. This beast alone, of all that keep the land, hath no use of a tongue—*unum hoc animal terrestre linguæ usu caret.*' (Lib. VIII.) Scarcely dissenting from Herodotus, St. Hilaire says that the Crocodile *seems to have no tongue*. The Professor of Natural History to the Royal College of Henry IV, H. Milne Edwards, in his new work *Eléméns de la Zoologie*, says that the tongue is indistinct—'*peu distincte!*'

"The tongue at its tip, including its outer third with its frenum is pale, thin, flabby, wrinkled and adherent underneath, along its whole width, appearing to have but little motion. It is truly tongue-tied. The middle third becomes massive, and begins to assume a roseate hue. The base or inner third is enormously developed, being thick, wide and strong, filling the mouth, and being moveable upward and backward. When the mouth is forcibly opened, even to the greatest extent, the posterior portion of the tongue is thrown up against the roof of the mouth, just before the palatine arches, so as to act as a valve, completely closing the passage to the pharynx, presenting from one angle of the mouth to the other internally, an even horizontal line. This arrangement must completely exclude water and the like from entering the posterior fauces—a wise provision of nature, because, having no lips, the water must always enter the mouth, when the animal is in its favorite element. It is very seldom that this valve falls, even when the mouth is widely opened for a long period, as an hour or more. This pressure I have often overcome, with a slight force, when passing the thermometer and food into the posterior fauces and gullet. The upper surface or dorsum of the tongue is rough, from large papillary elevations, which are less developed at the tip, but larger or redder towards the base, where, also, the *salivary secretion* begins first to show itself, but the isthmus of the palate, and the posterior fauces only, are well supplied with that fluid. The *roof* of the mouth is white, dotted over with a few dark spots, rough, firm, almost leather-like, and almost dry, except near the velum or palate, where it is lubricated with mucosity."

Since the commencement of the present century, no naturalist of any note has ever believed that the crocodile could move the *upper*



*jaw.* The ancient error seems to have originated from the circumstance that the lower jaw continues behind the cranium; the upper one thus appears to be movable, although it only moves with the entire head. As regards the *tongue* of the Alligator, Prof. Holbrook has given a very clear and accurate description of this organ, which agrees with that of Dr. Dowler in a remarkable manner. He says that, "Having no prehensile organs but the mouth and the strong teeth with which they seize their prey, drag and retain it under water, and breathing as they do, only atmospheric air, and with lungs, it follows that they might soon be suffocated, when thus submerged, as their struggling prey. A curious arrangement of the soft palate prevents this; it hangs down to meet a broad cartilaginous plate that projects upwards from the lingual bone, so as to close completely the fauces, (in which the trachea is placed) when the mouth is widely opened, and effectually prevents the introduction of water to the lungs, which would cause the death of the animal."—(Herpetology, vol. 2, p. 57.)

The following extract is curious as well as characteristic :

"Herodotus says, that *insects* (Βέλλα, *hirudo*,) or, as the translators have it, leeches, by getting into the Crocodile's mouth, suck its blood, and it dies exhausted. In good faith, he naively relates, that the *Trochilus* is the only animal that lives in peace with the Crocodile, into whose mouth it is in the habit of going to pick out these insects—in consideration of this service, the grateful Crocodile never injures the *Trochilus*. St. Hilaire believed, nay proved this story, if we are to credit the Royal Professor of Natural History, in the College of Henry IV, at Paris. He says in his Zoology (1837), That the enemies which the Crocodile fears are feeble insects; but, singular thing! little birds go to deliver him from this plague, and entering his mouth without fear, destroy these insects. '*Ce fait, observé par Hérodote et ensuite traité de fable, a été confirmé de nos jours par M. Geoffroy Sainte Hilaire qui accompagna l'Empereur en Egypte. C'est une espèce de pluvier qui rend au Crocodile du Nil ce service intéressé, et aux Antilles le todier a des habitudes analogues!*' (p. 367). A modern sailor, who, returning home, told his mother that in his travels he had seen flying fish, was reproached for telling a falsehood, whereupon he said, that one day in drawing up his anchor in the Red sea, he brought up one of the wheels of Pharaoh's chariot, a statement which his mother admitted without hesitation. *Verbum sat sapienti.*

"It is a pity to spoil so good a story—one so honorable to the politeness of the feathered race, and so creditable to the reptilian character. An English Baronet, Sir G. Wilkinson, in his late superb work on Egypt, (London, 1843,) avers '*that leeches do not abound in the Nile!*'"

I have frequently found *leeches* on our Alligators ; but have never observed them in the *mouths* of these reptiles. Neither have I observed them relieved by the feathered race ; but it is well known, that our cattle quietly permit the crow (*Corvus americanus*) to extract the parasitic grubs from their backs. The *Trochilus* may do an analogous service to the Nilotic Crocodile.

Dr. Döwler gives accurate descriptions of the eye and ear of the Alligator, which accord generally with those given by Prof. Holbrook. Dr. D. judiciously observes that :—

“Among the many fabulous accounts of this reptile, not the least defamatory and false is that concerning its want of *Sincerity*. It is said to be a hypocrite, and that its tears are false. Hear an old poet :

‘As cursed crocodile most cruelly can tole,  
With *truthless tears* unto his death, the silly pitying soul.’

“Fuller declares that ‘the crocodile’s *Tears* are never true, unless forced by the influence of saffron.’ I have seen the detestable juice of tobacco tried, by a negro, who, spirted his saliva in its eyes, as correctly as Boz could wish, but without producing any tears ; it only enraged the animal—an example worthy of the imitation of the great Primate, concerning whose spitting Mr. Dickens has written so well. An alligator has no deceit. If he hates you, he will hiss you to your face.”

In describing the feet of this reptile, our author has fallen into an error in supposing that they have not been accurately described by modern naturalists. He says :—

“The *Hands*, feet, or paws bear some resemblance to those of man and of some birds. The forefeet have five fingers, of which the three first or inner, have long bird like claws ; the two outer, none. The hind *feet* have four fingers, the three first or inner of which have strong, curved, tapering claws. There is a slight webbing between the second and third, and a full one between the third and fourth fingers of the fore feet, counting from within. The outer or little finger of the hind legs, joins the next or ring finger, with a web for half its length or one inch. Now whoever will take the trouble to consult authors, will find nothing but confusion and contradiction on this simple matter—even by those who base their classifications on the feet.

“In the London Encyclopædia of 1845, there is an incorrect engraving of the Alligator, representing *all the toes completely webbed*. In the new Parisian editions of the works on Natural History, by Lacépède, and by Prof. Edwards, not a vestige of webbing is seen among the toes at all ! The Encyclopædia Americana says, *all the fingers or toes have claws* ! ‘Their feet,’ says Cuvier, ‘are only semipalmate,’ None of these accounts are correct. The *Skin* has

numerous, longitudinal, transverse seams, dividing the integument into square figures. Notwithstanding these seams or fissures, which render the skin uneven, it is rather smooth, polished and not very hard, except where the bony plates are found, that is upon the upper part of the trunk."

Much of this confusion has arisen from confounding the Alligator with other genera of Crocodilians, some of which—as the Gavials—have the feet completely palmated. Prof. Holbrook gives the following description of the feet of our Alligator:—"There are 5 fingers, the 2d and 3d, and 3d and 4th, slightly palmate; the 3 internal only are furnished with nails. The posterior extremities are nearly twice the size of the anterior; they are rounded and covered in the same manner, but with larger plates. The tarsus is flattened and sustains 4 toes, the 3 external semipalmate, and the 3 internal armed with nails."—(Vide. Herpetology, vol. 2. pp. 55, 56.)

Dr. Dowler has given a very minute description of the integumentary Plates of the Alligator, which he seems to have studied carefully. He very justly ridicules the common opinion that "this animal's hide is generally impenetrable to a leaden musket ball." The bony plate which surmounts the cranium, will sometimes turn a rifle ball when shot very obliquely, but it will usually penetrate any other portion of the animal. Accident led me to discover a curious mode of managing a wounded Alligator. The animal had had its spine broken in the middle of the dorsal region by a buckshot, and was drawn out of the water by the tail. Wishing to dispatch my victim, I endeavored to strike him over the head with a heavy stick; but he suddenly turned over, and the blow fell across his *throat*. He was immediately thrown into convulsions,—the feet were extended and the toes expanded, and the animal remained apparently insensible for one or two minutes, and then gradually revived. Upon repeating the stroke, the same effect was produced, and I deliberately cut his throat with a pocket-knife before he revived. Since then, I have frequently resorted to this mode of stunning the Alligator, and with invariable success. The *trachea* is probably the organ which is most affected by the blow:—a distressingly suffocating sensation will be produced by a comparatively slight blow across the trachea of a man below the larynx. To produce the full effect in the Alligator the blow must be quite severe; the impression is only temporary, soon passing off.

When Alligators are wounded by a shot passing through the abdominal viscera, I have several times known them to *run out of the*



water; apparently incommoded by the introduction of the fluid into the abdominal cavity. As the diaphragm is merely rudimentary in these reptiles, and as the abdominal muscles are the agents in the respiratory movements,—it is manifest that, under such circumstances, inspiration would be attended with the introduction of water into the cavity of the pleura as well as the abdomen.

Dr. Dowler gives the following case of poisoning in an Alligator:—

“The following case, which may be fully relied on, shows that Alligators do not bear herculean doses of physic: Mr. I., an educated gentleman, engaged in the study of medicine, living near Fort Pike, in Louisiana, having observed in 1845, a recent “Alligator’s wallow,” and having at the same time killed a snake, he opened its abdomen, into which he inserted about three grains of strychnine, carefully enveloped in several folds of letter paper, which, being properly secured, the snake was left for the Alligator, which, the next day, was found dead, with its abdomen turned up. The snake had disappeared. The Alligator had been poisoned.”

He notices some remarkable peculiarities in the inflammatory process as observed in these animals:—

“I have examined several wounds which Alligators have received during the conflict in which they were captured. The following is a good example of Crocodilian *hyperæmia* or inflammation: A torn and contused wound, of two or three inches in length, between the fingers, was tumefied, but without *redness*. Granulations appeared, coated over with a dense transparent exudation, not flakey, but resembling half coagulated albumen. On touching these, the animal expressed great pain, withdrawing its limb and blowing loudly. Another foot which had been bruised and swollen, without any breach of the skin, presented extensive exfoliations of the cuticle, leaving the true skin *white*. Some recent bruises on the muzzle and in the mouth, together with an incision which I made in the back with the lancet, discharged a little thin, pale, scarlet colored blood. The general hue incidental to inflammation in man, did not occur. It was *white*—analagous types of which do sometimes happen in ordinary practice, as in white swelling, phlegmasia dolens, and in some fatal cases of glottidian and laryngeal hyperæmia, in which the submucous tissue is white, though swelled and infiltrated with lymph, serous, and purulent matter. I have found the epiglottis a mere sac, containing pus, though *blanched*. Hence, the necessity of changing the technology of pathological anatomy. Inflammation is, to some extent, a theoretical word, implying redness and so forth, which may not be essential to its physical history, an evil which may be greatly lessened by using words designating *physical changes only*, as cohesion, softening, brittleness, induration, size, figure, vascularity, injection, collapse, infiltration, and the like. In medicine, words, [prescriptions], are things, which blacken the body with leech-

---

es, blanch it with venesections, or modify its organization with the concentrated preparations of medical chemistry."

Our author has made some interesting observations on the Respiration of the Alligator.

"The Crocodilian *Respiration* is very irregular; I might say, sometimes altogether suspended for indefinite, or at least, very long periods, when the animal is not disturbed. The method I have adopted to prove this, is as perfect as could be desired. For several days, two large Alligators were so placed in their cages, that the water covered the mouth and nostrils completely. They lay perfectly still. There was no movement of the walls of the trunk. The least movement must have agitated the water. Every steamboat or dray that came near, caused slight undulations or waves—the Alligators none, when left unmolested, which, however, seldom happened, as persons frequently came near. On several occasions no interruptions occurred for half an hour, or even an hour. When they are annoyed, and wish to scold or frighten their enemies, they make deep inspirations, inflating their bodies very largely—this air they discharge in low bass notes, or rather with a bellows hissing sound, several times in a minute. There can scarcely be a doubt that one inspiration supplies a stock of air for hours, if not for days. \* \* \* By maltreating the Alligator, its inspirations and expirations may be produced at pleasure, but contrary to the chemical doctrine of pulmonary combustion, animal heat is not thereby augmented, as will be shown in the experiments on the temperature of this saurian."

In one instance in which I tormented an Alligator in his burrow or hole, (which was deeply submerged,) by means of a long pole;—at the end of *two hours* he found it necessary to come to the surface for breath; which was done by seizing the pole with his teeth, and following so gradually when it was withdrawn, that his approach was unsuspected until his nose protruded. There can be no doubt that *temperature* has a great deal to do with the time which respiration can be suspended in reptiles. When the circulation is vigorous, the necessity for receiving the air in the lungs is more urgent, than when approaching the state of hybernation.

So far as we know, the researches of Dr. Dowler on the *Circulation* in this animal, are original. He says:—

"The *Circulation* in this animal, after all my attempts to investigate it, appeared to me, at least, a perfect enigma. On several occasions I explored different regions, wherein I expected to find arterial pulsations, but without much success. This seemed the more surprising, as the axillæ, flanks and limbs were sufficiently soft and flexible, to induce the belief that the pulse might readily be detected. The muscles of the limbs are small, cord-like, and pliable.

Either from policy or politeness, the animals allowed the fullest examinations without resistance.

"I will give the details of one experiment: April 3d; noon; air, 68°; the axillæ and groins, each 65°: a search for the pulse began, and continued for three hours without intermission or disturbance. The whole attention was directed to this one object. In the first half hour I felt three strokes like those of an artery, in the part corresponding to the wrist. Similar pulsations were noticed in the hind leg, near the foot, amounting in all, to fifteen in three hours—none were felt in other regions. When a stroke occurred, two or three followed in as many minutes or less. The animals were now irritated. The limb was held in my hand. They puffed and raged, but no increased arterial action was perceived. Is their circulation voluntary, paroxysmal, suspensible? Does the blood flow equably, without arterial impulsion, as in the veins and capillaries? Is not the quantity of red blood, very small in this animal? Doctor, now Professor Le Conte, of Georgia, in decapitating an Alligator, on which he made some interesting experiments, recently, noticed that "not more than *two ounces* of blood flowed from the wound. (Vide N. York Jour. Med. Nov. 1846.)

I have several times observed thread-like *worms* in the blood which flowed from the Alligator. They were quite obvious to the unassisted eye, and continued to move about briskly until the coagulum became so firm as to interfere with their motions. Their presence might, however, have been accidental.

With regard to the *dict* of these reptiles, Dr. D. says:—

"A curious fact is mentioned by Mr. Audubon, and is directly in point, though shocking to the true disciples of Isaac Walton, namely—that the ornithologist was in the habit of killing Louisiana Alligators, for the purpose of getting fresh fish out of their stomachs. He says, "in those I have killed, and I have killed a great many, when opened to see the contents of the stomach, or *take fresh fish out of them*, I have regularly found round masses of hard substance like petrified wood. These masses appeared to be useful in the process of digestion, like those found in the maws of some species of birds. I have broken some of them with a hammer, and found them brittle and as hard as stones, which they outwardly resemble. And as neither our lakes, nor rivers, in the portion of the country I have found them in, afford even a pebble as large as a common egg, I have not been able to conceive how they are procured by animals if positively they are stones, or by what power wood can become stone in their stomachs." May not these masses be indurated clay? Are not Alligators, to a certain extent, dirt-eaters? Dr. Lindsay informs me that he has had many opportunities of knowing that these animals defecate large indurated masses, having all the physical properties of the mud banks in which they make burrows or dens."



I have almost invariably found these fragments of stones in the stomachs of Alligators. They are evidently intended to assist in the trituration of the food, in the muscular gizzard-like stomach. Their teeth being nothing more than prehensile organs, the food is swallowed in an unmasticated condition; this process being effected in the stomach as in birds. The muscles of the stomach arise from two white, shining, tendinous spaces on opposite sides of the organ, as in the rapacious birds. This organ has all the characters of a true gizzard, with the exception of the absence of an epithelium. That its function is that of a real triturating organ, is obvious from the fact that the stones are frequently *worn* by long attrition. I have extracted an Indian arrow-head of hornstone from the stomach of an Alligator, which was *highly polished*. I do not think this saurian can be considered a *Geophagist*, any more than the granivorous birds.

Our author continues:—

“Many authors assert, that alligators cannot *swallow* under water. In offering some facts to disprove this assumption, the sagacity of these animals will be more or less illustrated. A gentleman, on two occasions, watched alligators while catching sunfish, which were swimming in shoals, in shallow water. The alligator placed his long body at a suitable distance from the shore. As soon as the fish came between him and the land, he curved his body, so that they could not pass; the tail was moored on land; the mouth was opened under water, and brought so close to the shore, that the fish had no method of escaping, but through the mouth, where they were entrapped. *Incidit in Scyllam, qui vult vitare Charybdin.*”

We have never had an opportunity of testing this question definitively, but are disposed to accord with the opinion of Dr. Dowler, from various observations.

We heartily concur in most of the following sentiments:—

“The learned and the unlearned, seem never tired of telling about crocodilian *ferocity*—Cuvier, among the rest. Professor Edwards, in his new work on Zoology, says ‘this animal is very ferocious and dangerous, even to man.’ So says the New London Encyclopædia, which gives a very dramatic story about an alligator, that invaded a South American city, and in the presence of the governor, carried off, in his capacious jaws, a living man! Mrs. Trollope’s story, which follows, has become classical, and is quoted as authority. The scene is laid in Louisiana, the hero is a squatter. The poet is a lady: ‘towards day-break, the husband and father was awakened by a faint cry, and looking up, beheld relics of three of his children scattered over the floor, and an enormous crocodile, with several young ones around her, occupied in devouring the remnants of their horrid meal. He looked around for a weapon, but finding none, and aware that he

could do nothing, he raised himself gently on his bed, and contrived to crawl from thence through a window, hoping that his wife, whom he left sleeping, might with the remaining children, rest undiscovered till his return. He flew to the nearest neighbor, and besought his aid; in less than half an hour, two men returned with him, all three armed; but, alas! they were too late! the wife and her two babes lay mangled on their bloody bed.' (Six killed.) Captain Alexander, a voluminous writer of travels, who visited Louisiana in 1831, says, the people 'are obliged to keep a sharp look out lest their children should be snapped up by alligators.' In Lacépède's Natural History, just from the French press, an engraving is given, representing an alligator as swallowing a negro! This work, quotes M. de la Coudrenière's account of the Louisiana crocodile, (*Journal de Physique*, 1782), in which he sets forth, that this animal *feeds on men, particularly negroes*—'*particulièrement les negres*'—and that it roars as loud as a bull! Other writers say, that this animal prefers negroes to all other kinds of diet. If this be true, the fondness is mutual. A gentleman of New Orleans, once a planter, assures me, that his slaves were in the habit of eating alligators, which, invariably made them sick. All his authority was insufficient to prevent this practice. The sickness was so frequent and so peculiar, that he could readily recognize it without difficulty. He gave emetics for its cure. The suspected substance was always brought up; though the negroes always denied having eaten the same. The fondness extends to dogs, which are often fed with the tail of this animal, which is the choicest part. A physician, who once tasted this animal's flesh, informed me that its flavour, in some degree, resembled that of fish, though unpalatable."

I have never known any ill effects to result from eating the flesh of the Alligator. To me it is exceedingly insipid, and, indeed, requires high seasoning to render it barely eatable. This animal is much more timid than is usually supposed. Where they are unaccustomed to man, they are apparently bold. Prof. Holbrook says that there is no well authenticated instance in Carolina, of their having preyed on man.—(Vol. 2, p. 58.) J. Hamilton Couper, Esq., of Hopeton, near Darien, Georgia, informs us that he has known a strong mastiff to whip an Alligator in three different instances. The dog would raise himself in the water and spring directly upon the head of the reptile. He also mentions the case of a negro, who, while asleep on the banks of the St. Johns river in Florida, was seized by an Alligator and dragged into the water, but succeeded in extricating himself by plunging his fingers into the eyes of the animal. He was bitten in the thigh, and was so much injured as to remain a cripple for life. We have heard of several analogous cases; but they are very rare, and on the whole, we are disposed to agree with Dr. D. when he says:—

“Admitting these statements as altogether true, it may be truly said, that there is scarcely an animal, wild or domestic, which has committed so few injuries upon man—a position worth illustrating, as even twenty-two centuries cannot make a falsehood, true. Besides, it is right to give the alligator, as well as the devil, his due.”

Again, Dr. D. remarks:—

“The absurd story, that alligators eat their own young, cannot be believed for a moment. A gentleman informed me, that one of his negroes having caught a young alligator, which whined like a young puppy, the parent came towards the negro with a rapidity he had never witnessed on other occasions—a kind of jumping motion, which caused the boy to run, after dropping his captive. I have been assured, when danger is imminent, that very young alligators run into the parent’s mouth for safety. I have this statement from a highly respectable physician.”

The young reptiles would certainly fare badly if they should get into the muscular stomach of the parent, amidst fragments of stones! We have never heard that this is a custom among Alligators, but it is a very universal opinion, that such is the practice among the ophidian reptiles. Perhaps, the impression has arisen from the circumstance that several snakes are *not oviparous*. All the *Crotalaloidea* are viviparous, that is, the eggs are hatched in the female, and the young afterwards extruded. A gentleman of high authority informs us, that he saw a Water-snake killed, from which 52 young snakes escaped by means of a rupture in the side! Most likely they came from the womb of the parent.

We close our hurried and imperfect notice of this pamphlet, with the following extract in relation to the *temperature* of this saurian:—

“The following experiments illustrative of the temperature of the alligator, made with an accurate thermometer, which was tested by freezing, boiling, etc.; and may be relied on. I have omitted to enumerate the duration and repetition of the experiments, for the sake of brevity. The thermometer was seldom changed short of ten or fifteen minutes, and never until it appeared stationary. These experiments, which might have been greatly augmented, are, if I may judge, quite sufficient to show, that Cuvier and his disciples greatly err, when they assert, that this animal approaches the hot blooded quadrupeds in temperature. It approximates not the hot blooded animals, but the mercurial column of the thermometer!

“March 31st, noon—air 62°; one alligator in the groins, etc., 57°—another 57½°; the water in which they reposed, about two inches deep, gave 57°. At 6, p. m., air 62°; the flanks, axillæ, under the tongue, pharynx, and gullet, each 61°; both the water in which their abdomens rested, and other water near at hand, gave exactly the same temperature. The day was cloudy.



"April 1st, sunrise—cloudy, humid, air  $60^{\circ}$ ; alligator's flanks, etc.,  $59\frac{1}{2}^{\circ}$ ; gullet nearly  $60^{\circ}$ ; a little water in which they lay,  $59\frac{1}{2}^{\circ}$ ; other water, near,  $60^{\circ}$ . Noon, air  $63^{\circ}$ ; alligators, and the water in which they lay,  $61^{\circ}$ ; other water  $62^{\circ}$ . At 5, p. m., air  $67^{\circ}$ ; alligator's  $65^{\circ}$ ; water two inches deep  $64^{\circ}$ ; other water  $65^{\circ}$ .

"April 2d, sunrise—air  $59\frac{1}{2}^{\circ}$ ; alligator's flanks and gullets, posterior fauces, each  $63^{\circ}$ ; the water in which they lay, and which was now removed, gave  $68\frac{1}{2}^{\circ}$ ; other water  $59^{\circ}$ .

"April 3d, 7, a. m.—the animals and their cages are quite dry; air  $64^{\circ}$ ; groins, gullet, etc., each  $63^{\circ}$ . Noon, air  $69^{\circ}$ ; alligators  $65^{\circ}$ . Sunset, air  $64^{\circ}$ ; alligators nearly  $65^{\circ}$ , and dry.

"April 4th, 1, p. m.—air  $63^{\circ}$ ; flanks  $60\frac{1}{2}^{\circ}$ ; gullet  $61^{\circ}$ . Sundown, air, flanks and gullet, each  $64^{\circ}$ ; animals dry.

"The following experiments are deemed relevant to this subject:—While engaged in making a most extensive series of thermometrical observations, illustrative of the diurnal and annual temperature of the Mississippi River, I have had a few opportunities of experimenting on its fishes, immediately after they were taken out of the water—an example of which is here subjoined. 1845, July 29, air at  $5\frac{3}{4}$ , at 6, and at  $6\frac{1}{2}$ , a. m.,  $76^{\circ}$ ; River  $85\frac{1}{2}^{\circ}$ . a fish (*perca*) weighing about three pounds, was (after crushing its brain) placed on a plank, in a shade, with a thermometer thrust into the gullet. In two minutes, the temperature was  $81^{\circ}$ , in 3 m.  $81^{\circ}$ , in 5 m.  $80\frac{3}{4}$ , (dead) 5 m.  $80^{\circ}$ , (body flexible) 10 m.  $80^{\circ}$ , 10 m.  $79\frac{3}{4}^{\circ}$ , 20 m.  $79\frac{1}{2}^{\circ}$ , (now one hour—body somewhat rigid) 10 m.  $79\frac{1}{2}^{\circ}$  (universal rigidity) 10 m.  $79\frac{1}{2}^{\circ}$ . During these experiments, the air of the spot had raised to  $83^{\circ}$ ; and had now, in one and a half hours, begun to communicate its caloric to the fish."

In almost every respect, this is a most remarkable reptile. If the heart and lungs of an Alligator be removed together, and the latter be inflated, *the former will continue pulsating for 24 hours.*

J. LE C.

---

*Remarks on Gastrotomy.* By. JOHN P. FORD, of Nashville, Tenn.

Read before the Tennessee State Medical Society, and ordered to be published.—(from New-Orleans Med. and Surg. Journal.)

I do not so much expect to present new ideas on this subject as to collect, and perchance arrange those which are scattered through the pages of surgical writers. The importance of the operation will commend itself to the mind of every medical man, on account of the difficulty which often meets us in our efforts at diagnosis as well as the dangerous tendency of those affections which we may think require its adoption, and the capital character of the operation itself. There are many affections which have, by common consent, been denominated

*opprobria medicorum*; and if any efforts on our part can tend to reduce the number of them or in any way lessen the certainty of their character, they will be well applied. The consciousness of having mitigated human suffering and prolonged human life, is the fullest and most grateful reward incident to the practice of our profession.

The operation of gastrotomy for the delivery of the fœtus from the mother's womb, when from any cause the effect cannot be produced through the natural passage, is, according to the generally received opinion, of ancient origin. That it is often successful is abundantly attested by the numerous recorded cases scattered along the history of surgery, and particularly in our medical periodicals of late years. Dr. Churchill has collected the number of cæsarean operations, and finds 409 cases in which 228 mothers were saved.

Another class of diseases often calls for this operation, much more commonly than the first mentioned, and on account of the nature of the parts implicated, is much more successfully treated—for while in the cæsarian section, not only the walls of the abdomen are penetrated by the knife, but the no less important organ (the uterus also); in hernia our incision only reaches the cavity of the abdomen, and not ordinarily afflicting injury on other important viscera. Yet in some instances, even here, the intestinal tube does not escape the surgeon's cut, and success stands ready to crown his efforts.

In this, as well as the former class of affections, the operation is only mentioned to show, that gastrotomy may be performed in numberless instances without being necessarily fatal. And we may not reasonably say, that the operation for strangulated hernia, is not in the full sense gastrotomy. To all practical intents, it is the same with that operation properly called gastrotomy.

In the one as well as the other, the incision is made through the skin, the cellular substance, the muscles, and peritoneum down to the intestines. The best authorities as well as our own observations, prove that the operation for strangulated hernia, if properly performed, and performed sufficiently early, is one of comparatively little danger.

It is an opinion supported by ancient and somewhat modern authority in surgery, that in all operations involving the parieties of the abdomen, peritoneal inflammation was more to be dreaded than any other consequence. But it has been left to recent investigation, to establish the fact, that such fears have been by our surgical fathers greatly overrated. Travers, many years ago, and lately Dr. Gross, have proved by their experiments, that if the wounds of the intestines were properly attended to, inflammation of the peritoneum was not regarded as of very serious importance—if escape of fecal matter was prevented, peritonitis rarely supervened to a dangerous extent—while it cannot be denied, that wounds of any important organs of our system are accompanied by danger to the sufferer; the idea I would advance is, that peritoneal inflammation does not now stand pre-eminently and necessarily fatal in wounds of the ab-

domen, whether inflicted extensively by accident or made more neatly and sparingly by the surgeon's knife.

The diseases to which I would call the attention of the Society, as justifying and even sometimes loudly demanding the operation of gastrotomy for their relief, belong to that class which may be denominated obstructions of the intestinal tube from mechanical causes. All along the track of medical record, for a long time back, may be found here and there an isolated instance of daring surgery, which has tended to relieve the patients in some cases or to establish in my estimation, the practicability and justifiableness of such an operation in later days; especially since, by a careful collection of facts, we may better understand the value of the operation and its modified application to the various affections which we may be called to treat.

Invagination of the bowels is an affection of exceeding interest to the medical profession. However much medical science has advanced towards perfection in early days, to the present time, on many points, this disease, then as now, has been looked on generally in the light of a fatal one. Dr. Bigelow says, "internal strangulation, we have reason to believe, is a fatal disease, except in rare instances, in which a spontaneous restoration of the parts, under favorable circumstances, may have taken place." Dr. Dunglison says, in speaking of intussusception, the only hope we can have is, that the invaginated portion may be thrown off, and a cure thus obtained; although such a result, it must be admitted, is extremely rare. Heberden says, in such cases physicians should try to disarm death of some of its terrors; and if they cannot make him quit his prey, they may still prevail to have life taken away in the most merciful manner. Alluding to the administration of opium as the only means of soothing the pangs of death, Parr expresses the same opinion; and in fact it is the tone of almost all writers on the subject, that the disease is necessarily fatal unless purgatives relieve. There are some exceptions to this remark, as I shall show presently.

It is a matter of interest in the present inquiry to ascertain, if possible, the condition of the parts involving such serious consequences as we see in this affection. The symptoms of invagination are pain in the bowels, costiveness without fever and without tenderness, at first; often an elongated tumour may be felt in some part of the abdomen; as the case advances there appear disturbance of the circulation, enlargement of the abdomen, and soon comes on those alarming symptoms, such as small rapid pulse, distress of countenance, difficulty of respiration, vomiting of stercoraceous matter, cold tremulous extremities, cool skin bathed in clammy sweat, which becoming more violent, loudly proclaim to the physician that death is at hand. From the discovery, that gangrene has often affected the bowels in intussusception, it was readily supposed that that was the cause of death; and were the fact of its presence universally established, it would tend greatly to lessen the chance of successful treatment by an operation. But it can be shown, I think, that such is



not always the case; and when that condition of the bowels does exist, it is only incidental. The autopsy of Mr. "Legare, late Attorney-General, showed the abdomen greatly distended, sigmoid flexure of the large intestine in such a state of distension that its external circumference was in one place 15 inches. It had a dusky green color as if from commencing gangrene, but there seemed to be no softening nor diminution of its natural polish."

Lawrence in his work on Rupture says, "above the obstructed part the bowels is found after death inflamed and greatly distended—from the contracted part downward the bowel is smaller than usual, and not inflamed." Mr. Stephens, in a work on Hernia, published in London, in 1829, gives the history of a case in which, on post-mortem examination, the bowel was found doubled on itself, so as to obstruct peristaltic action and the passage of its contents; yet there was no stricture nor inflammation of the bowel or peritoneum.

Sir Charles Bell says, "the symptoms depend on the obstruction to the descent of the contents of the bowels, and not on the state of the intestines of the sac," (speaking of Hernia), and says, "it is shown by dissection, that distension and the consequent excitement of the muscular coat produce those very symptoms which attend strangulated hernia; consequently all the symptoms will be rendered milder, and the life prolonged, by the ease with which the stomach ejects its surcharge. By the inverted action, and vomiting of stercoraceous matter, the distended canal is in a certain measure relieved.

It is within the recollection of several members of this society, that such was pre-eminently the case with a patient, attended by my colleague, Dr. Winston, Mr. Craig's negro girl, of this neighborhood—it was a case of obstinate obstruction, in which all the symptoms advanced to the last stage of distress and danger—stercoraceous matter was vomited freely, and at every discharge, which was exceedingly copious, the patient expressed herself greatly relieved. No doubt the free evacuation of the bowels above the obstructed point was one of the chief means of her ultimate recovery.

The details of the case I have not at hand, nor would they be of unusual interest, except to illustrate this point. A case occurred in the practice of my friend, Dr. R. C. K. Martin, which was shown on dissection to be a complete obstruction, by the passage of a knuckle of the ilium through another bend of the same bowel. There was great distension and no gangrene—and of such character, may it be seen, is the testimony of all who have made post-mortem examinations in this disease; not in every case of course, I would be understood, but in enough to show, that although gangrene may exist, it is not a necessary concomitant of diseases of obstruction, which even end in death. It can be easily conceived, that that amount of obstruction might exist which would allow the circulation of the blood to some extent, and still prevent the passage of the contents of the bowels—enough circulation going on in the parts to prevent gangrene; but still enough of pressure and distension capa-

ble of bringing about those symptoms of which we speak, and death itself.

When an obstruction exists in any portion of the intestinal tube, which prevents the passage of its contents beyond that point, and it is of such a character as not to cut off the circulation of the obstructing point entirely, the consequence is, the accumulation of matter above, distension and a corresponding pressure of the vessels of the neighborhood—this distension and pressure produce the strange, perhaps unaccountable lesion of the nervous system, as evinced by the rapid pulse, the gastric disturbance, and in a later stage all the urgent symptoms of collapse and speedy death; it may require a few days or as many hours to produce these effects. If the obstruction is entire and sudden from the beginning, these nervous symptoms supervene suddenly, as in the case of strangulation of the bowel, in hernia; whether produced suddenly or gradually, the condition of the nervous system will be the same, sooner or later. Now, if the circulation be cut off by the intensity of the strangulation, gangrene necessarily supervenes, though not as a certain connexion with the cause of death. To show that distension may produce those symptoms which will end in death, you will revert to the case of Craig's girl mentioned above. Again, in the case reported at the last annual meeting of this Society, by Dr. Manlove, the same train of facts was clearly exhibited. It will be recollected, that the boy was suffering under those symptoms which denote with unerring certainty, the approach of dissolution; and when the distension was relieved by the incision made in the bowel and by the discharge of its contents, they gave way as by magic.

Petit is said to have punctured several times the sacs of strangulated hernia, and thereby relieved the distension caused by the superincumbent mass, and the patients were cured (although in one case there was evidently gangrene) without artificial anus. A charlatan, not understanding the nature of strangulated hernia and supposing them to be abscesses, is said by Velpeau to have gained a brilliant reputation by puncturing them, and effecting a cure in many cases. The intestines being freed from distension by the puncture, soon recovered from the symptoms of strangulation.

Mr. Velpeau alluded, in the Academy of Paris, to a case of tympanitis, when a variety of means had been resorted to without success, in which he plunged a trochar into the intestines, and gave vent to a large quantity of gas through a canula. In the course of five days he made four punctures; the man recovered perfectly. These cases are mentioned only to show the great influence of distension as a prominent cause of the distressing symptoms.

It will be, perhaps, always a source of difficulty to determine with absolute certainty, the existence of a mechanical obstruction in the bowels. But in regard to diagnosis in almost all important and serious diseases, we may not expect to be without difficulty.

Velpeau says, if the affection attack suddenly upon a strain or vio-

lence, if the patient thought he perceived a tearing, accompanied with crepitation and pain, propagated from a given point to the rest of the abdomen—if from this moment vomiting, first of mucous and alimentary substances and then of stercoraceous matter continues, while alvine evacuations have been impossible, and the usual signs of evident peritonitis are absent, it would be very difficult not to admit the existence of internal strangulation. The distinctive symptom to which Dr. Watson, of the Royal College of Physicians, attached more value than any other was, that the intestines rumble and roll, and propel their contents downward to the same spot, and no further. But it will be of necessity left to the judgment of each practitioner to determine the value of all the symptoms which may be present in the case, and which may point his mind to the conviction of the existence of strangulation—his practice must be modified by circumstances impossible for me to enumerate in this paper. I would, that I could here point out that correct diagnosis which would lead us aright in all cases.

Should we still continue to view these cases as beyond the reach of remedial means? Shall we stand silently by and witness those results without any effort to relieve them? who does not regard a case of invagination or torsion of the bowels as necessarily fatal? It is so taught in the books—it is so practised by physicians.

Called to attend a case presenting the symptoms generally described above, in which all the remedies have been used which may be suggested to the mind, and still seeing the slow but certain approach of death, what should be done? We cannot doubt, but that this condition is brought about by a temporary injury to the bowels, nor can we doubt the fact, that if by any means we could remove the injury of the bowels, the symptoms would disappear as by a charm. Gastrotomy is the resort which I would recommend, an incision made into the cavity of the abdomen, would almost certainly reveal the point of mischief, and the course of conduct should be directed by circumstances. If, on reaching the intestines, it is found that a portion of the bowel is invaginated, a relief of that condition will probably be easily effected, when it will be seen that nature will again pursue her usual track and health will be restored. To this result, the greatest impediment will be the wound in the walls of the abdomen; and in the present state of medical science, I presume, no one will contend that such a wound, inflicted by a surgeon's knife, must be fatal.

Samuel Cooper, speaking of hernia, says there seems to be ample cause to believe, that the generality of fatal events consequent to the operation, are attributable to the disease and not to the attempt to relieve it. Mr. Potts' opinion was, that the operation when performed in a proper manner and in due time, does not prove the cause of death oftener perhaps than one in fifty cases.

Again, should it, on reaching the bowels, be found that there ex-



ists torsion or a passage of a portion of the bowels through the mesentery, the course is plain, the position should be corrected.

But suppose it is found, that there is neither invagination nor torsion, but a stricture of the bowels, producing permanent obstruction or impacted *fæces* or other substances forming an insuperable barrier to the passage of matter from above, and this distension exists to which I have attributed so much mischief; what is the plan to be adopted? I should puncture the bowel as near and above the point of obstruction as convenient, and relieve the distension by the escape of the distending matter, taking care to avoid, by the usual means recommended by the best surgeons, the escape of *fæcal* matter into the cavity of the peritoneum, thereby forming a temporary artificial anus, if the symptoms would justify me in attempting the operation of gastrotomy.

I would believe, that unless relief were speedily afforded, death would ensue. And, although, an artificial anus, permanent or temporary, may be justly considered as a great evil, yet it must be viewed as a less one than death. By puncturing the bowel, under these circumstances, we would gain time for the future administration of remedies suited to the character of the obstruction. With these views in the performance of the operation, I would hold myself authorized by the best dictates of humanity and science.

In the performance of this operation, there are many obstacles to success which will need to be met by the ingenuity and firmness of the operator; the opposing coats of the invaginated bowels sometimes become agglutinated by the deposition of lymph—if the connection be slight, but little tractile force will be required to disengage the bowel, or a careful dissection may become necessary. The same line of conduct should guide us in the event of finding the bowel in a gangrenous condition. It does not comport with the character of this paper to elucidate the plan to be pursued in minutiae—that is sufficiently laid down by our excellent late surgical writers, as how the sphacelated portion is to be cut off and the sound ends united; by what sutures, whether the glovers' or interrupted suture, whether cylindrical substances should be used to sew the two ends of the intestines on or not—these are not the subjects; they are to be determined by the taste of each one who reads the views of those who have written on the subject. My object has been to bring to the consideration of the Society, what I consider to be leading points in the subject, hoping to attract their attention to a condition of things seemingly to be too much neglected.

I will not tire the patience of the Society by the enumeration of the cases of gastrotomy which are scattered (rather sparingly I acknowledge) through the surgical books and journals. There are, however, many to be seen, and they may serve us as beacon lights to guide our professional conduct in similar cases.

In this paper I have endeavored to show, that distension above the point of obstruction being one of the prominent causes of danger, the

success of the operation may be calculated on with more certainty than if a gangrenous condition of the bowels were always present. That invagination, torsion, and even permanent obstruction of the bowel may be relieved by the operation of gastrotomy—the last mentioned, perhaps, imperfectly; the two first perfectly, with a restoration to health. That the operation, under proper circumstances, need not be necessarily fatal oftener than many other capital operations, undertaken by the most prudent surgeons, as every day occurrences.

I am aware I have trodden on somewhat forbidden ground. I think that good authority may be quoted to prove, that under any circumstances, the operation of gastrotomy is an unjustifiable operation; that it has been said to have been wisely discountenanced by almost all therapeutists, and condemned as the procedure of unenlightened quackery, and wholly inadmissible. Notwithstanding these things, let us go on and diligently add one mite of information to another until we shall have collected such an amount as we shall be able to draw and be served from in time of need, in professional conduct. No subject is at once cleared of its difficulties; and may we not hope that the period of investigation is now dawning, when not only this, but others, equally intricate and important, may be so far divested of their darkness and their doubts, that we may not err therein.

The most I can hope for in such a paper as this, with views so crudely and hastily thrown together, is to incite inquiry and experiment among the members of the Society, by which this subject may be brought to light in its various bearings on some of the direct ills to which the human system is liable.

---

### *Plague and Quarantine.*

The abolition and modification of the quarantine laws by England and Austria, in 1841, has produced a strong sensation in France, and has led to strong and just remonstrances against her sanitary system. The government submitted the question to the Academy of Sciences, which made no report. The Academy of Medicine, harassed incessantly, with communications on the subject of the Plague, named a commission of fifteen members to investigate the subject. This commission has been indefatigably engaged in the investigation, and have left no means unemployed to enable them to arrive at satisfactory conclusions. These are found in the Archives Générales de Médecine, and are as follows:

1st. The Plague originates spontaneously, not only in Egypt, Syria and Turkey, but in a great many other parts of Africa, Asia and Europe.

2nd. In every country where it originates its development may be

rationally attributed to causes acting on a great part of the population. These causes are, a residence on the alluvial and marshy lands near the Mediterranean sea; or certain rivers, the Nile, the Euphrates, and the Danube; low, imperfectly ventilated and crowded houses; a hot and moist atmosphere; the action of animal and vegetable matters in a state of putrefaction; unwholesome and insufficient food, and great physical and moral misery.

3rd. All these conditions united, exist every year in Lower Egypt; the Plague is endemic in that country, and it is found every year in a sporadic form, and about every ten years it prevails as an epidemic.

4th. The absence of any pestilential epidemic in ancient Egypt, for a long time, during which an enlightened and vigilant administration, and a good sanitary police struggled victoriously against the causes of the Plague, justifies the hope that the same means will hereafter produce the like results.

5th. The condition of Syria, Turkey, Tripoli, Tunis and Morocco, being about the same as at those epochs, when epidemics of Plague spontaneously manifested themselves, authorises the belief that similar epidemics may again burst forth in those places.

6th. There is little room to fear that Plague will appear spontaneously in Algiers, because the Arabs and the Kabyles living, the one under tents, and the other on the summits and sides of rocks, cannot engender the malady, and moreover the draining of many marshy places, and the ameliorations, in the construction and police of the few existing towns seem to offer a sufficient guaranty against the spontaneous development of the disease.

7th. The progress of civilization, and a general and constant application of the laws of hygiene, of themselves furnish sufficient means to prevent the spontaneous development of Plague.

8th. Whenever the Plague has raged in Africa, Asia, or Europe, it has always presented the characteristics of an epidemic disease.

9th. Sporadic Plague differs from that which is epidemic in the smaller number of its subjects, but more especially in the absence of the usual characters of an epidemic.

10th. The plague propagates itself in the manner of most epidemic diseases, that is to say by the air, and independently of any influence which can be exercised by its subjects.

11th. The inoculation with blood drawn from a vein of an individual laboring under the disease, or with the pus from a pestilential bubo, furnishes but equivocal results. Inoculation with the serosity taken from a pestilential carbuncle, has never produced Plague; it has not then been proved that the disease can be transmitted by inoculation.

12th. A rigid and attentive examination of facts shews that in the midst of epidemic foci, immediate contact with thousands of individuals laboring under this disease, may take place without danger to those who can exercise in the open air, or in well ventilated places,



---

whilst no rigorous observation has demonstrated the transmissibility of Plague by contact with its subjects.

13th. Facts in a great number prove that the furniture and clothing which have been used by persons laboring under the disease, have not communicated the Plague to those who have used them without any previous purification, and that too in a country where a pestilential constitution had recently existed. Facts which seem to furnish a different result possess no value until they are confirmed by new observations made beyond the epidemic or miasmatic foci of infection, and from those countries where Plague is epidemic.

14th. The transmissibility of the disease by merchandise, in countries where it is endemic or epidemic, has not been proved.

15th. Plague is transmissible in places where it is epidemic, by the exhalations given out by persons who are laboring under the complaint.

16th. It is incontestible that Plague is transmissible beyond the sources of its epidemic origin, in ships, or in the lazarettoes of Europe.

17th. There is no proof that it is transmissible beyond such sources, by the immediate contact of individuals laboring under the disease.

18th. It has not been proved that Plague is transmissible, beyond its epidemic foci by the furniture or clothing which have been used by Plague patients.

19th. It has not been established that merchandise can carry Plague beyond the sources of its epidemic origin.

20th. The classification adopted in our lazarettos, of articles susceptible or not susceptible, does not rest upon any fact or observation worthy of confidence.

21st. The study of the means by which the pestilential principle contained in furniture, clothing, or merchandise, may be destroyed, will be useless, until the presence of this principle has been demonstrated.

22nd. Plague may be transmitted beyond its epidemic foci by miasmatic infection, that is, by air charged by pestilential miasma.

23rd. Plague is more or less transmissible according to the intensity of the epidemic, its period, and the organic dispositions of those subjected to the action of pestilential miasma.

24th. Individuals laboring under the disease, by vitiating the air of the places that they occupy, may create foci of pestilential infection which will produce the complaint.

25th. Persons who labor under sporadic plague, do not appear to create foci of infection as active as when the disease is epidemic.

26th. Foci of pestilential infection may continue after the removal of plague patients.

27th. Foci of infection once established on a ship, by the presence of one or more persons laboring under the disease, may be transported to a great distance, and often acquire a fearful intensity on vessels with troops and travellers.

28th. Moveable foci of infection cannot become the sources of secondary foci, unless they meet with the conditions necessary to the development of Plague in the countries whither they are transported.

29th. The ordinary time of incubation of Plague, is from three to five days. The duration of this incubation does not appear to have ever exceeded eight days.

30th. When a country becomes a prey to epidemic Plague, the inhabitants are exposed both to the pestilential constitution and to the influence of the subjects of the disease. Isolation preserves from the last, but not from the first. Beyond the epidemic foci of which the limits are generally easily determined, the influence of the pestilential constitution ceases. Isolation in this case secures from all danger of the disease.

---

*Case of Doubtful Sex.* By WM. JAMES BARRY, M. D., of Hartford, Conn.—(from N. Y. Journal of Medicine.)

In March, 1843, I was requested to examine the case of Levi Suydam, aged 23 years, a native of Salisbury, Conn. At the exciting and warmly contested election of the spring of this year, almost everything bearing the semblance of the human form, of the male sex, was brought to the ballot-box. It was at this time, and under these circumstances, that the above mentioned person was presented, by the whigs of Salisbury, to the board of Select-men, to be made a freeman; he was challenged by the opposite party on the ground that he was more a female than a male, and that, in his physical organization, he partook of both sexes.

The following was the result of the first examination. On exposing his person, I found the *mons veneris* covered in the usual way, an imperforate penis, subject to erections, and about two inches and a half in length, with corresponding dimensions, the dorsum of the penis connected by cuticle and cellular membrane to the pubis, leaving about one inch and a half free, or not bound up, and towards the pubic region. This penis has a well formed glans with a depression in the usual place of the meatus urinarium, a well defined prepuce, with foramen, &c. The scrotum not fully developed, inasmuch as it was but half the usual size, and not pendulous. In the scrotum, and on the right side of the penis, one testicle of the size of a common filbert, with spermatic cord attached. In the perineum, at the root of the corpora cavernosa, an opening through which micturition was performed, this opening large enough to admit the introduction of an ordinary sized catheter. Having found a penis, and one testicle, though imperfectly developed, and without further examination, I gave it as my opinion, that the person in question was a male citizen, and consequently entitled to all the privileges of a freeman.

On the morning of the 1st Monday in April (Election day) I was informed that Dr. Ticknor would oppose Suydam's admission. Suydam came forward, Dr. Ticknor objected. I then stated to the meeting, that from an examination I had made, I pronounced the person in question to be a male, and requested that Dr. Ticknor might, with the consent of Suydam, retire into an adjoining room, and examine for himself. This was done, when Dr. Ticknor stated to the meeting that he was convinced that Suydam was a male. Suydam accordingly was admitted a freeman—voted—and the whig ticket carried by one majority!

A few days after the election, it was told me that Suydam had regular catamenia. I then commenced further investigations, and learned from Mrs. Ayres, the sister of Suydam, that she had washed for him for years, and that he menstruated as regularly, but not as profusely, as most women. I next saw Suydam, who very unwillingly confessed that such was the fact. I then requested him to meet Dr. Ticknor and myself the next day at my office; when the following additional particulars were elicited. Said Suydam is five feet two inches in height, light colored hair, fair complexion, with a beardless chin, and decidedly of a sanguineous temperament, narrow shoulders, and broad hips; in short every way of a feminine figure. Well developed mammæ, with nipples and areola. On passing a female catheter into the opening through which micturition was performed, and through which, he again stated, he had a monthly, periodical, bloody discharge, instead of traversing a canal and drawing off urine, the catheter appeared to enter immediately, a passage similar to the vagina, three or four inches in depth, and in which there was considerable play of the instrument. He stated that he had amorous desires, and that, at such times, his inclination was for the male sex; his feminine propensities, such as a fondness for gay colors, for pieces of calico, comparing and placing them together, and an aversion for bodily labor, and an inability to perform the same, were remarked by many.

I further learned from an old lady who was present at the birth of Suydam, that on the second day after his birth, Dr. Delamater, who attended as accoucheur, made with an instrument, the opening through which he has ever since performed micturition.

---

*Homœopathy.*—(Illinois and Indiana Med. and Surg. Jour.)

Prof. LINTON thus describes Homœopathy; we take this extract from his article on that subject in the *Western Lancet*:—

We assert that Homœopathy, whatever of truth there may be in some of its speculations, is perfectly inert in practice; and if we fail in proving this assertion true, then facts are mere illusions; logic a humbug, and reasoning a farce. To proceed. In the first place, our disposition to try all things, has induced us to try "*Globules.*"



We have used them to ascertain their *pathogenetic* effects; we have taken the sulphur, but it caused nothing like the itch, which was promised us; we have used the quinine without experiencing the slightest symptoms of a chill; the belladonna, and nothing like hydrophobia followed. This we did at the suggestion of a Homœopathic practitioner. We have also tried these articles on some friends, without the slightest result. We have used the "globules" in affections which we were confident would *get well of themselves*. Here they were successful, the patient got well! But then we tried another experiment. We selected several cases which we felt confident would *not get well of themselves*, and these we subjected to the treatment of one who ranked high as a Homœopathic practitioner. The result was in every instance a complete and *triumphant failure*.

The following gives the author's opinion of the shaking, rubbing, and spiritualizing process:

But again say the defenders of small globules, *the rubbing—the trituration* of the medicines increases their power and activity. Some of them say that it spiritualizes matter to rub it! Hence they grind their medicines very fine, and shake the vial of drops—they rub about six minutes at each trituration, and shake about six times at each dilution, though Hahnemann says that he had to reduce his shakes, so powerful did six make them!!!!

Now, any one that is in danger of believing this monstrous nonsense, can easily test its truth or falsehood. A certain amount of arsenic will kill a dog—a small dose, say half a grain, will not hurt him. Give the dog then a half grain of arsenic and watch its effects. Then take another half grain and triturate, and grind it, and rub it, until it is *spiritualized* and *strengthened* as much as it is possible by this process. Then dilute it, and shake it well *six times six*, and give to the aforesaid dog. If Homœopathy be true, it will kill him in a very short time; if Homœopathy be false, the dog will go about his business. An easier test would be to ascertain if shaking a teaspoonful of brandy would enable it to make a man drunk. It would do so if Homœopathy be true.

Why, if this principle were sound, then the apothecary might double his stock at an hour's warning, not by the difficult and expensive process of importing fresh medicines, but by the easy one of *shaking* what he had on hand.

The liquid that was worth but one dollar, the dose being twenty drops, would be rendered of double that value by a few shakes, which would so strengthen it that ten drops would suffice! Sailors and soldiers would find this principle of great value; they would put a vial of whiskey in their pockets, and, by shaking it, have grog enough for a voyage or campaign! Nay, armies might subsist on a little portable soup, increased in power and spiritualized by shaking! What an invention for starving Ireland! what a great trade shaking would be if Homœopathy were not a humbug! Instead of endeavoring to accumulate, the world would sit down satisfied to *shake* what it has already gotten.

## PART III.—MONTHLY PERISCOPE.

*A Case of Uncommon Acuteness of the Sense of Vision.*—There is living in this region a young man of 23 or 24 years of age, who is reported as being able to see, with his natural eye, *animalculæ* in common well and spring water. This faculty was noticed when he was some 15 or 16 years of age, by persons for whom he was at work, in consequence of his refusing very often to drink water handed to him, in which nothing could be discovered by common eyes. I made some experiments with him, enough to be satisfied that his case was no hoax; and did intend to make more, but have lost sight of him, and suppose he has left the neighborhood. His complexion is fair; temperament sanguine; eyes blue, less than the common size, with very small pupils.—[*Western Jour. of Med. and Surgery.*

---

*Tincture of Iodine in obstinate Intermittent Fever.*—Dr. Seguin, in the *Bulletin Général Therapeutique*, speaks very favorably of the effects of the tincture of Iodine in obstinate intermittents. He was led to its employment in such cases from its effect in a case of intermittent fever, protracted to eighteen months, in which he prescribed it for an enlargement in the spleen. This visceral engorgement was not removed, but the fever was promptly cured. Some months afterwards the disease returned, and was treated with sulphate of quinine without success; the tincture of iodine was again given, and the disease was soon removed. He relates several other cases, in which it succeeded, after the quinine had failed. He states, however, that it is not uniformly successful, but that was always so in cases where the quinine failed. He gives to adults thirty drops of the tincture in three doses, during the pyrexia, at intervals of one hour. He increases the dose, according to the effects produced, to forty, fifty, and even sixty drops, and continues its use for several days after the disease has disappeared.

---

*Ext. of Tobacco in Neuralgia.*—For a number of years Dr. Gower has been in the habit of employing, with great success, topical applications of the infusion and alcoholic tincture of tobacco in prosopalgia, and he was not sure whether it acted as an excitant or sedative, until M. Chippendale discovered that the active principle of this vegetable was nicotine. Dr. G., of all the various preparations of nicotiana, is most partial to the extract. He has seen three cases of this obstinate neuralgia yield instantly and permanently to a single application of the aqueous solution of this extract. And its success when rubbed upon the diseased jaw was no less marked in a case of tooth-ache.  
[*Western Journ. Med. and Surg.*

---

*Ergotine as a Hemostatic.*—On the occasion of M. Bonjean's presenting the *Académie des Sciences* with an account of an additional experiment he made with *Ergotine*, in which the bleeding from the

carotid of a horse, divided through a third of its circumference, was at once arrested by the application of ergotine; M. Velpeau delivered the following sensible and pertinent observations:—

“What M. Bonjean says of Ergotine has been said by an infinity of other persons concerning different substances. Hæmostatic means of a *real* efficacy are nevertheless as rare as ever. The error arises from these authors having forgotten two things in their experiments. 1. In animals, the plasticity of the blood is much greater than in man, whence it follows that means which will arrest hæmorrhage in the one, may easily fail to do so in the other. All those who have made experiments on living animals know that, in the horse, the ox, the sheep, for example, the largest wounds of arteries rarely give rise to mortal hæmorrhage. The blood, ceasing to flow almost of its own accord, leads the public and inexperienced authors to believe that it is the *means* or *remedy* employed which has closed the artery. Thus, what powders, waters, liquids, what arcana of every kind have been vaunted at first as infallible; and then, after a searching examination, rejected as useless! 2. In man, many arterial hæmorrhages also cease either spontaneously or under the exertion of mere compression, without our being obliged to have recourse to the ligature; so that it is easy to attribute to a pretended hæmostatic substance a result which takes place quite independently of its employment.

“I have neither cause nor desire to throw any doubt upon the value of M. Bonjean’s experiments; but practice has been so often deceived by similar announcements, that it behoves the Academy to accept them with due reserve. I must add, that the practitioners who have tried *ergotine* or the *ergot of rye* have as yet derived nothing conclusive from its use. When, in *uterine hæmorrhage*, the ergot proves useful, it does so by inducing contraction of the uterus, and not by any special action it exerts on the blood or on the arteries. Thus we see the question of surgical hæmostatics is at once a very complex and a delicate one: and we should not receive facts concerning it without a certain degree of distrust, and only give them a very limited publicity, until they have been tested by a more mature examination.”—[*Comptes Rendus*.

*Relapse of Cancer*.—True as it is that relapse is much to be feared after operation for cancer, it is no less so that we may sometimes mistake the effects of inflammation for such. M. Lisfranc has made the part which inflammation acts in cancer the subject of very attentive study. A woman had her left breast removed recently. Cicatrization at first took place rapidly; when, all of a sudden, the wound broke out again, the surrounding skin assuming a slate-colour, and lancinating pains reappearing. Here was every appearance of a relapse; but M. Louis ordered a dozen leeches to the margin of the wound, the pains ceased, the slate-colour disappeared, and cicatrization was soon completed.—[*Gazette des Hôpitaux*.



*Opium dressing for Cancers.*—M. Tanchou speaks highly of the relief from pain to be obtained from employing the following dressing in cancerous ulcers. Digest, during 24 hours, at a temperature of about 78°, a certain quantity of rough-powdered or bruised opium in a sufficient quantity of water to form a thick paste. Cover the ulcer with this a line or two in thickness, once or twice a day according to the severity of the pain, and place over it a piece of thin gummed paper or court-plaster to prevent evaporation.—[*Medico-Chirurgical Rev.*

*Tinct. Iodine to Hemorrhoids.*—Dr. Vandervoort stated that he had used *Tinct. of Iodine as an application to Hemorrhoidal Tumours*, with highly satisfactory effects in a case to which it had been applied.—[*New-York Jour. of Med.*

*Occlusion of Vagina.*—Dr. Post gave an account of an operation performed by Dr. J. Kearney Rodgers, for *congenital occlusion of the vagina*. The patient was 24 years of age. There had been efforts at menstruation; the external organs were well formed, and half an inch of vagina existed. The uterus could be felt through the rectum. A catheter having been introduced into the bladder, and a finger into the rectum, an incision was made between them with the scalpel. The operation was continued in part by the handle of the scalpel, and of sufficient depth to admit the whole forefinger, when the cul-de-sac was reached. This was distinguished by fluctuation. An incision was now carefully made through the membrane. A thick dark fluid escaped. A sponge was then introduced to dilate opening.—[*Ibid.*

*Solution of common Salt in Ophthalmia.* (Jour. des Connaissances Médico-Chirurg.)—Dr. Moraes, of Lisbon, reports that having suffered a chronic ophthalmia which resisted all the means he had employed, he then tried a solution of common salt which procured a complete cure. He has since employed this article in his clinic. The degree of concentration he regulates according to the sensibility of the patient. He uses common water, warm in winter and cold in summer.

*Congenital Dropsy.—(Ascites.)*—This case was that of a female child nine weeks old. I saw it October 25th, 1844, when the mother informed me that, at its birth, the abdomen seemed to be unusually protuberant, and that shortly afterwards it became subject to paroxysms of restlessness and crying, for which anodynes were administered without producing any relief. At my examination the general system was not emaciated, nor was there any anasarca of the extremities. The skin was rather soft and moist. It sucked heartily, had more thirst than natural, and had a slight coat upon the tongue. The abdominal tumor was so great as to extend down over the pubis,

and also upwards and backwards over the ensiform cartilage and false ribs.

I prescribed diuretic and purgative medicines, and directed iodine ointment to be rubbed on the abdomen twice a day. No amendment followed this prescription. The child fell into the hands of another physician, who tapped it and drew off a considerable quantity of water. It eventually, however, died.—[*Western Jour. of Med. and Surg.*

*Nervous Vomitings of Pregnant Women.* (Bulletin Général Thérapeutique.)—There are few affections for which a greater variety of medications have been proposed than the vomitings which occur during pregnancy. The multiplicity of therapeutical means indicate their insufficiency. M. Bretonneau has recently discovered a process as simple as it is efficacious to combat this derangement. He supposes that the vomitings like those in analogous conditions, as in hernial subjects for example, where there exists no strangulation, are purely sympathetic, and should be attributed to a difficulty in a dilatation of the uterus, from a defect in the proportion between the dilatability of that organ, and the development of the embryo. This theory, whether erroneous or otherwise it matters but little, led M. Bretonneau to institute the following medication. He caused frictions to be made to the abdomen of the patient, with a pomade composed of five grammes of the extract of Belladonna to thirty of lard, or what is preferable, with a solution of the extract of Rhatany in water, made into the consistence of a syrup. The absorption in the last mode is more prompt and complete than when the pomade is employed. The internal administration of the belladonna, in whatever form it may be used, does not produce the same results. Ordinarily the vomitings continue until the belladonna inunctions are resorted to. Another fact which should be noticed, is that other stupefians, as opium, &c., have not a similar effect. We invite the attention of practitioners to this treatment, as it has uniformly succeeded in the numerous cases in which we have seen it employed.

*M. Velpeau on Flexions and Engorgement of the Uterus.*—"A proof of how often the term *engorgement* has expressed an error of diagnosis is found in the fact that of late years, and in proportion to the progress of science, engorgements of the uterus become more and more rare, while the number of vicious flexions is augmented. I do not fear to state, that of 50 women reputed to have uterine engorgement, 45 will be found upon examination to be suffering from some deviation from the normal position of the organ. How can we explain this error of diagnosis being committed by well-educated practitioners? The reason is simple. The woman is examined in the recumbent posture, and the finger meets, in a certain direction of the neck, forwards if there be ante flexion and backward if there be retro flexion, with a tumour of considerable size and sensible, which is declared to result from an engorgement. But the tumour is simply

the body of the organ bent at a more or less obtuse angle, and sometimes at a right angle. We can easily assure ourselves of this, especially when, as is the case with most women who have borne children, the walls of the abdomen are neither tense nor thick. By gently depressing the hypogastrium, we may grasp the body of the womb between the two hands, and appreciate its volume as accurately as if we could see it. Engorgement is one of the least usual conditions of the organ that we meet with, and on the contrary the body of the organ is often found somewhat atrophied.

"Accurate diagnosis, in consequence of the treatment it designates, is here of great importance; for when we have to do with a simple deviation we dispense with the use of means proper for resolving a tumefaction which does not exist, of debilitating remedies each more mischievous than the other, and with confining the patient for months in the recumbent posture. We order for her, moderate exercise, a substantial and tonic regimen, antispasmodic, ferruginous drinks, saline baths, astringent vaginal injections, and lastly an abdominal bandage which may support the viscera and prevent their weighing down the deviated organ."—[*Gazette des Hôpitaux*.]

*Treatment of Chronic discharges (gleet) from the Urethra by the application of a blister upon the knee.* (*Gazette Médicale*.)—Dr. Deane, instead of placing the blister as is generally advised near the seat of the disease, pursues a different practice. Having to treat a case three years ago, for a discharge from the urethra which had lasted nineteen months, and had resisted various kinds of medicines, he thought of trying a blister around the knee. The same evening there was a distinct strangury—the following morning the discharge had considerably diminished, and at the end of 24 hours it had disappeared completely. Since then the author has treated in the same manner twenty cases. Nine were cured as promptly as the one mentioned above, and not one resisted the treatment. In some the blister was renewed twice, and in one only three times.

#### THE PERMANENT RELIEF OF TOOTHACHE.

To the Editor of the British American Journal:

Sir,—In a country where so many are martyrs to this species of suffering, you will, I think, be conferring a general benefit, by making known through the medium of your journal, the following simple, and, as I have found it, successful method of securing carious teeth from the effects of cold and changeable weather, and keeping them perfectly free from pain at all times. This wonder-working remedy! consists in the daily and *habitual* use of a weak solution of creosote, saturating the tooth-brush with it and using it first; after which cold water and whatever tooth-powder the individual may be in the habit of employing.

This practice, in my own experience, and in that of others at my suggestion, I have found a very successful preventative to toothache arising from the presence of carious teeth. I am rather disposed to



believe, too, (contrary to the opinion of some dentists,) that the carious process is suspended by its employment; but on this head I would not be confident, although Reichenbach has recorded cases of caries cured by the use of the watery solution of creosote.—“Bulletin Gén. de Thérapeutique for May, 1835.” M. Fremanger is also of the same opinion as to its effects, and considers that it acts “by combining with the calcareous salts of the bones and forming a new combination, which, by its solubility, tends to disengage the areolar tissue and stop the ulceration at the proper point for the commencement of cicatrization.”—“Cormack on Creosote.” I wish the profession in Canada would take up the subject.

Yours respectfully,

J. D. M'DIARMID,  
Staff-Surgeon, Prescott.

R. Crosoie, 3i.; Spt. Rectificat, ʒss.; Aq. Destillat, ʒviiss. M.  
It may be colored with cochineal.

*Method of making Leeches Bite.*—Dr. Boursier says, that by placing leeches in a mixture of two parts of wine and one of water, they are in a few minutes very active, and take hold instantly; and that if they are gorged with blood they disgorge themselves and will draw again.—[*Journ. de Chimie Méd.*]

*Mystery of Nature explained.*—The *mystery of nature*, advertised to be seen in Boston, and declared to be the wonder and admiration of the medical and scientific men of Europe and the United States—the right hand representing an eagle's claw and the left a lobster's—is simply a malformation; one hand is furnished with a thumb and one finger, and the other with three—no more resembling the extremity of a lobster's leg, or an eagle's, than the horn of a rhinoceros.—[*Boston Méd. and Surg. Journal.*]

*Opium not poisonous to the Rabbit.* By M. LAFARGUE. (*Comptes Rendus des Séances de l'Académie des Sciences*, March, 1845.) M. Lafargue, having observed that the poppy was a favorite food with the rabbit, on which it thrived and got fat, felt some curiosity to ascertain whether that animal would be affected by opium. For this purpose he dissolved three grains of the acetate of morphia in a quantity of water, and mixed with a certain quantity of bran, which a rabbit eat in two days, but was not in the least affected by it.

[*Edinburgh Med. and Surg. Journ.*]

*Number of the Insane in France.*—The most recent account of the insane in France, which we have seen, is that contained in the great work on *statistics*, published by the Minister of Agriculture and Commerce for 1843.

|   |   |   |            |
|---|---|---|------------|
| According to this the population of France in 1835, was | - | - | 33,540,910 |
| And the number of the Insane, was                       | - | - | 14,486     |
| In 1841, the population was                             | - | - | 34,213,927 |
| And the number of the Insane, was                       | - | - | 19,778     |
| Death among the Insane in 1835, was                     | - | - | 1,394      |
| “ “ “ 1841, “   | - | - | 1,770      |

In 1841, there were in the various public establishments for the Insane in France, 10,111 patients.

The following are the assigned causes of this disease.

|                                      |       |                        |        |
|--------------------------------------|-------|------------------------|--------|
| Effects of age,                      | 541   | Onanism,               | 293    |
| Idiotism,                            | 2,234 | Diseases of the skin,  | 80     |
| Excessive irritability,              | 655   | Wounds and blows,      | 154    |
| Excess of labor,                     | 176   | Syphilis,              | 148    |
| Destitution,                         | 329   | Hydrocephalus,         | 92     |
| Epilepsy and convulsions,            | 1,137 | Chagrin,               | 1,186  |
| Fever-Pthisis, Disease of the heart, | 245   | Political excitements, | 118    |
| Breathing deleterious gases,         | 88    | Ambition,              | 314    |
| Abuse of wine and liquors,           | 792   | Pride,                 | 291    |
| Love and Jealously,                  | 767   | Religious anxiety,     | 471    |
| TOTAL,                               |       |                        | 10,111 |

## MEDICAL INTELLIGENCE.

*Epidemic disease of the Genitals in Children.*—Dr. J. S. PEACOCKE, of Louisiana, in a letter to the Editors, describes a disease which prevailed quite extensively among the young negroes in the section of the state in which he resides. "It consisted in the discharge of a puruloid matter, resembling that of gonorrhœa, from the vagina. None over ten years of age were the subjects of the disease. The males discharged a similar matter, and it seemed to issue from the inner lining of the prepuce. At first the discharges looked healthy, but ultimately became streaked with blood. There was no pain, and the general functions were in a normal state. The disease was periodical, returning at irregular intervals. It yielded at first to simple tepid water, followed by some vegetable astringent. When the disease returned the metallic astringents, as the acetate of lead, &c., were employed, but although they acted beneficially at first, the disease continued to return until cool weather. Tinct. of Cantharides, Balsam Copaiba, and Tinct. of Guaiac—all succeeded in arresting it, but only temporarily. This disease was observed at several places at the same time."

*Trismus Nascentium.*—Dr. W. H. ROBERT, of Madison, Ga., in a letter to one of the Editors, relates a case of this usually fatal disease, which terminated favorably. He says: "The case occurred last winter. The child had been sick two days before I saw it—it could only open its mouth sufficient to take fluids. Tetanic spasms were very frequent, and at each spasm the umbilicus was forced out by the contraction of the muscles, it (the umbilicus) had not healed in the least, and presented a very sore surface. To prevent as much as possible the pressure of the intestines against the umbilicus, a piece of adhesive plaster 3 by 2 inches, with a hole in the centre, just sufficient to let the chord pass, was applied over the abdomen, and it was dressed with Turner's Cerate; small doses of a mercurial, passed off with Castor Oil, were given for three or four days, during which time the child was nourished with milk poured into its mouth, which was readily swallowed. The child recovered entirely."

*Extraction of a piece of Pewter from the Ear.*—We have received from JOHN B. BOWERS, M. D., of Barnwell, S. C., a piece of pewter which he extracted from the ear of a negro man. The general appearance of the metal shews very clear-

ly that it must have been poured into the ear while in a melted state. Dr. B. says: "A negro man came to me to do something for him, saying that his wife had attempted to kill him, by pouring melted lead into his ear, he being intoxicated at the time when she committed the act. I paid no attention to his story, supposing he was mistaken. I frequently saw him afterwards, and he always would say that if I did not take the lead from his ear that it would kill him. His master consulted me on the subject, but I told him that it was only an idle tale of the negro. Fifteen months after, the ear became so painful that his master requested me to examine and see if there was any thing in it. On laying him on his side, so that the sun shone in his ear, I discovered the metal, which was extracted with considerable difficulty. The pain ceased immediately on the removal, but he cannot hear as well in that ear as in the other."

METEOROLOGICAL OBSERVATIONS, for December, 1846, at Augusta, Ga. Latitude  $33^{\circ} 27'$  north—Longitude  $4^{\circ} 32'$  west Wash. Altitude above tide 152 feet.

| DEC. | Sun Rise. |           | 2, P. M. |           | WIND. | REMARKS.                     |
|------|-----------|-----------|----------|-----------|-------|------------------------------|
|      | THER.     | BAR.      | THER.    | BAR.      |       |                              |
| 1    | 43        | 30 6-100  | 67       | 30 3-100  | S. E. | Fair.                        |
| 2    | 45        | 30        | 72       | 29 94-100 | S.    | Cloudy.                      |
| 3    | 59        | 29 87-100 | 69       | " 92-100  | W.    | Fair.                        |
| 4    | 38        | 30        | 68       | 30 3-100  | N.    | Fair.                        |
| 5    | 38        | 30 10-100 | 61       | 30 12-100 | N. E. | Fair.                        |
| 6    | 47        | 30 10-100 | 66       | 30 8-100  | N. E. | Cloudy.                      |
| 7    | 46        | 30        | 71       | 29 87-100 | S.    | Fair.                        |
| 8    | 54        | 29 68-100 | 74       | " 55-100  | S.    | Cloudy—wind and rain 80-100. |
| 9    | 56        | " 60-100  | 76       | " 66-100  | W.    | Fair.                        |
| 10   | 59        | " 55-100  | 66       | " 65-100  | N. W. | Fair—rain 10-100, at night.  |
| 11   | 38        | " 90-100  | 57       | " 95-100  | N. W. | Fair.                        |
| 12   | 31        | 30 3-100  | 55       | " 99-100  | S. E. | Fair.                        |
| 13   | 30        | 29 96-100 | 62       | " 94-100  | W.    | Fair.                        |
| 14   | 38        | " 95-100  | 52       | " 90-100  | W.    | Cloudy.                      |
| 15   | 44        | " 90-100  | 61       | " 90-100  | N. E. | Fair.                        |
| 16   | 41        | " 75-100  | 40       | " 44-100  | N. E. | Rain 95-100 of inch.         |
| 17   | 41        | 30 7-100  | 53       | " 20-100  | N. W. | Fair—moschitoes now killed.  |
| 18   | 34        | 29 47-100 | 48       | " 47-100  | S. W. | Cloudy.                      |
| 19   | 36        | " 59-100  | 42       | " 80-100  | N. W. | Fair—some clouds—wind.       |
| 20   | 29        | " 97-100  | 49       | 30 2-100  | N. W. | Fair.                        |
| 21   | 27        | 30 7-100  | 55       | 30 7-100  | W.    | Fair—some clouds.            |
| 22   | 27        | 30 10-100 | 60       | 30 14-100 | S. E. | Fair.                        |
| 23   | 34        | 30 20-100 | 60       | 30 20-100 | N. E. | Fair.                        |
| 24   | 28        | 30 20-100 | 57       | 30 12-100 | N.    | Fair.                        |
| 25   | 32        | 30 4-100  | 59       | 29 90-100 | S. W. | Cloudy.                      |
| 26   | 38        | 30 3-100  | 64       | 30 7-100  | S.    | Fair—foggy morning.          |
| 27   | 34        | 30        | 66       | 29 91-100 | S. W. | Fair.                        |
| 28   | 52        | 29 83-100 | 68       | " 81-100  | S. W. | Cloudy during morning.       |
| 29   | 49        | " 90-100  | 70       | " 86-100  | S. E. | Cloudy during morning.       |
| 30   | 58        | " 86-100  | 68       | " 86-100  | S. W. | Cloudy.                      |
| 31   | 55        | " 92-100  | 76       | " 90-100  | S.    | Fair.                        |

21 Fair days. Quantity of Rain 1 inch and 85-100. Wind East of N. and S. 9 days. West of do. 15 days.

ERRATA.—The reader will please correct the following errors in the Review Department of this No.—viz: page 91, line 8, for long read *bony*. Page 96, line 2, for some read *none*. Page 99, line 7, for prehensible read *prehensile*—the same correction on page 105, line 4. Page 103, line 34, for receiving, read *renewing*. Page 104, line 20, for 1846 read 1845.



# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—MARCH, 1847.

[No. 3.

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE VIII.

*Intermittent Fever—its various forms—their treatment—the abortive treatment of Remittent Fever.* By LEWIS D. FORD, M. D., Professor of the Institutes and Practice of Medicine in the Medical College of Georgia.

In continuation of this subject, commenced in No. 9, Vol. I., of this Journal, the writer passes to that form commonly called Remittent fever.

If, as has been shown, it is the duty and interest of the practitioner of this climate to understand the lineaments and the pathology of malignant Intermittent fever; how much greater is the obligation upon him, to know well the nature of Remittent—the former being of comparatively rare occurrence, whilst the latter may be called, emphatically, *the disease* of the Southern climate, constituting, as it does, the great mass of his cases, in the summer and autumn; and the result of his treatment of this fever determining his professional reputation.

The popular, almost universal name of Bilious fever, it may be remarked, in passing, is highly objectionable—a name suggested by the marked disorders of the biliary secretion usually present, and by the pathology which regards it as dependent essentially, upon disease of the liver. Manifestly inappropriate to those cases not characterized by bilious disorder, it is, at best, an unfortunate name, because of the prejudice it creates in weak minds, that vitiated bile or a diseased state of the liver is its proximate cause. There is a peculiar propriety in the simple name of Remittent; this describing the prominent characteristic feature of its every variety, thus directing the mind to

this *paroxysmal* character as the most essential feature, and giving a bias to enquiry into the nature of paroxysmal fever, which directs to the knowledge of their nature.

Remittent fevers are characterized by an abatement of all their symptoms, at regular periods, generally once in twenty-four hours. This state of remission differs from an intermission, in that there are still present the febrile symptoms, but these diminished in violence. Individual cases, having this one feature of remittency in common, yet vary in their other symptoms, and in the organ or organs prominently affected; so that it is impossible to give a general description of Remittent fever, which shall embrace all its varieties. It is therefore proposed to notice very generally the simplest form and then its most difficult and dangerous varieties. The object of the writer being rather to develop the pathology and treatment, it will not be necessary to give at large, the symptoms of simple Remittent fever, and therefore he merely refers to the description of this to be found in systematic writers. The remark upon reading these descriptions is obvious, that they do but detail the symptoms of a paroxysm of Intermittent. Cullen, for example, embraces both forms under the one head of intermittents, alluding to the difference in the duration and degree of the intermission, as the only difference in their external characters. And, when described by others as different forms, yet it is but the reproduction of the symptoms of the intermittent form. So that it may be considered a fact, that cases of *simple* Remittent fever do occur in this climate, and this is generally in the early summer, and run their course, for many days, without any more prominent local affection than in intermittents, and often terminate in intermittents.

In referring to the graver forms of this fever even up to the most malignant, it may be remarked, that all these are marked by some predominating affection of one or more vital organs, thus giving individuality of character to each. Thus, a common form is that, which may be called cephalitic Remittent—in which there is violent pain in the head and giddiness and intolerance of low degrees of light and sound; these symptoms alternating with high maniacal delirium, and accompanied with nausea and even vomiting—these latter symptoms, evidently, not dependent on a gastritic state, but having the same relation to the state of the brain as they have in idiopathic phrenitis, uncomplicated with gastritis—sympathetic gastric disturbances, capable of being calmed by antiemetics. If unrelieved, this form

has a rapid course, and terminates with the symptoms of the last stage of fatal Phrenitis.

A still more common form is that marked by head-ache and even delirium; but these are not as prominent and distressing symptoms as persevering nausea and violent, uncontrollable vomiting, with a red, dry tongue, or furred yellow, or brown in the middle, its edges and end only, red and dry, with pain at the epigastrium increased by pressure, the bowels generally loose—constituting gastric Remittent. Another is Enteritic Remittent, characterized by diarrhea which is notably increased, at every succeeding paroxysm, and by even mild laxatives. Each one of these forms is pretty uniformly accompanied with disorders of the biliary secretion. But there are other forms, characterized chiefly by these bilious derangements; as by an excessive secretion of bile of a healthy color, a bright yellow color, poured out in such quantity as to regurgitate into the stomach and produce nausea and vomiting of this bile, and by bilious purging. Another variety in the biliary secretion is the entirely opposite of this, dependent on a more serious and more controlling disorder of the liver—a suspended secretion, accompanied with nausea and vomiting, but no bile discharged. With fulness, heaviness, and oppression of the epigastrium, sighing and general restlessness, a dull, head-ache, dingy color of the skin, torpid bowels, which under the operation of saline and even drastic cathartics, do not discharge bilious stools.

Each one of these forms of Remittent, may terminate in the typhoid state, with its characteristic symptoms of delirium, *subsultus tendinum*, extremely frequent pulse, diarrhea and tympanitis.

The most fatal, or most rapidly fatal, is the algid form—characterized by imperfect reaction, unequal distribution of animal heat, cold extremities, and coldness of the general surface, and disordered sensation—a sense of heat at the surface as well as internal heat, with oppression of the chest and epigastrium, laborious respiration, jactitation, &c. This old form is now better known under the new name of *Congestive Fever*.

In reviewing the opinions of the profession on the pathology of Remittents, it strikes the writer that too much importance has been given to the local congestions and inflammations, which form universally a part and parcel of the more serious cases of the disease—that too much reliance has been placed upon *post-mortem* appearances, as indicative of original and substantial disease—that the accidents and consequences of the disease have been mistaken for its original basis.



Allowing for a moment that the evidences of gastro-intestinal inflammation were much more frequent than observation determines them to be—that they were found in every case; the conclusion is by no means warranted, that the disease is substantially a gastro-enteritis; it is as absurd as would be the opinion that variola is a cutaneous phlegmasia, founded upon the uniformity of its characteristic pustulous eruption—as absurd as the conclusion that gastro intestinal inflammation formed no part of Infantile Remittent fever, merely because autopsic examination found the physical traces of disease in the cavity of the cranium, and the stomach and intestines sound. Whilst the information of pathological anatomy in this disease has a great value, yet the interpretation of the functional symptoms is more to be relied upon, in determining the location, at least, of its primitive irritation.

However the forms of Remittent fever may be varied by the predominance of local symptoms, this character of periodicity marks them all—the disease is equally *paroxysmal*, when characterized by encephalitic symptoms as by gastric—*paroxysmal* in the thoracic varieties, and still *paroxysmal* in the simple form, which is characterized by no more prominent local disease than exists in the paroxysm of the simplest intermittent; and therefore this periodicity cannot be dependent upon any one of these local affections, it must depend upon some affection of some part of the system, as uniformly present as this remittance. These local affections, then, how violent soever they may be—how controlling soever their influence upon the progress and final termination of Remitting fever, may, with great propriety, be called complications or accidents, in reference to the fever itself. As to the relation of these complications to periodical fever, the writer referring to the cases adduced in the previous No. of this Journal, to prove the independence of the fever upon them, would remark further, that these accidents are manifestly not immaterial, but on the contrary, exert the most decided control over the regularity of the paroxysms, and are the immediate causes of their fatality. Thus, simple remittents are most regular in their paroxysms, and preserve this regularity throughout their whole course—the paroxysms more distinctly separated from each other; and, again, as the local affection becomes more fixed and more violent, in the same degree is the regularity of the paroxysms interrupted, the remissions are shorter and more obscure, until finally, with the complete establishment of the phlegmasial state upon the organ, the

remissions cease and the case passes to the continued form. Thus it may be perceived, that so far from phlegmasial disease determining the Remittent fever, the very-opposite is true—it destroys the type.

It is true of malignant remittent as of Intermittent fevers, that they preserve their character of mild Remittents, for some paroxysms, and gradually pass into the malignant; and of these the remark is universally true, that the local phlegmasia or congestion is increased by each succeeding paroxysm—that while the paroxysm is completed within its natural period of twenty-four hours, the local symptoms increase and abate with the increase and abatement of the paroxysm. To adopt the beautiful simile of Torti—"these wait upon the paroxysm, like the shadow upon the substance." So true is this, that in the vast majority of cases, when the paroxysm is broken up, the local affection subsides, without the necessity of addressing remedies to it—just what might reasonably be expected from observing its dependence upon the paroxysm.

That the local congestion or inflammation has no influence in determining the periodicity of Remittent fever, will be manifest from the fact, that cases of mild Remittent fever do sometimes run their whole course of seven or ten days, without any local phlegmasia or congestion greater than is found in simple intermittents; that such cases used to be treated in former years, among us at least, greatly to the comfort of patients, by small repeated doses of tartar emetic—a medicine by the common consent of the profession, proscribed, wherever there is the remotest suspicion of the existence of gastritis; to which latter affection it has been so fashionable of late, to refer as the primitive irritation in Remittent fever.

If the Remittent fever be independent of local congestions or inflammations, the proper cases to select for illustrating its pathology are the *simplest cases*, those uncomplicated by any adventitious accidents.

The characters of simple Remittent fever show it to be essentially an intermittent. The simultaneous occurrence of intermittents and remittents, in the same locality—nay, in different members of the same household, all under common circumstances of living and of exposure, proves satisfactorily their dependence upon one and the same common cause. The symptoms of the paroxysm of simple Remittent and Intermittent fevers are so similar, that the most penetrating observer cannot with confidence, determine, during the passage of a first paroxysm, whether the case will develope itself as an

intermittent or remittent. Again, what more common than the change of type from intermittent to remittent and *vice versa*. And the appeal is fearlessly made to practitioners—Is it not common to meet with cases of paroxysmal fever, beginning as intermittents, continuing as remittents, and ending fatally by the supervention of a paroxysm marked by symptoms of the utmost malignancy?

As in intermittents so in remittents, one of the most uniform symptoms is tenderness to pressure in some portion or portions of the spinal chord; and, further, the controlling influence of spinal disease over the symptoms manifested in the head and in the various abdominal viscera and over the muscular disorders, is illustrated by the efficacy of revulsives to the spinal column, in relieving all these distressing symptoms of the paroxysm.)

The essential identity of Intermittent and Remittent fever is shewn from another character of the latter form, alluded to by all practical writers, viz: its tendency to increase in the violence of its symptoms, on alternate days—at the tertian period. In fine, an inspection of the character of simple Remittent fever shows no more difference between it and a quotidian intermittent, than between a quotidian and tertian intermittent—a difference merely in the interval—that they are all essentially the same disease.

The conclusion to which the writer arrives as to the pathology of Remittent fever in all its varieties, from the simplest to the most malignant, is, that Remittent fever is an intermittent, rendered irregular by some complicating accident—that these complications, such as congestion and inflammation of one or more of the vital organs, so far from determining the remittency, tend to destroy it—that when existing, whether produced by the paroxysm or by some peculiarity in the organs, they are increased by every succeeding paroxysm—that such is their dependence upon the paroxysm, that when this is checked these accidents disappear, without requiring subsequent local treatment; and that the fundamental lesion upon which depends Remittent fever, is in the nervous centres—the spinal marrow and the brain.

This view of the nature of Remittent fever indicates the same grand object to be accomplished in the treatment of each of its varied forms, viz: to prevent the recurrence of the paroxysms and to moderate the violence of their symptoms when present. Thus, as intermittents, the treatment naturally is divided into two parts—the one appropriate to the remission, the other to the exacerbation. Now, if



an enlightened experience will sustain the course of practice, which this pathology indicates, it will add confirmation to its truth. To this test at last, must every system of treatment submit itself; for the writer is ready to acknowledge, in the face of all that has been written against the empiric method, that the so-called rational method ultimately rests upon empiricism—that all we know of the operation of medicines and of remedial methods is the result only of experience.

1. *To prevent the return of the paroxysms.*—This distinct indication to be accomplished in the treatment of *Remittent fever* is of recent origin, and contrasts strikingly with the objects set forth in almost every system of practice, with which the writer is acquainted. In the light of an experience of twelve years' faithful adherence to this object, it is lamentable to look back upon his own previous practice and that of the whole body of medical men, directed according to the teachings of the many popular "Practices of Physic," these founded manifestly upon the notion, that Remittent fever once fairly commenced, cannot be arrested in its course—teaching that symptoms are to be palliated as they arise, the fever all the while being permitted to renew its paroxysms, with all their increasing and fatal concomitants. The writer, conscious that he will be doing a service to his brother practitioners, whose attention may not as yet have been directed to this important point, turns to some of the most popular and recent of these hand-books, to substantiate his declaration.

Look, e. g., at the objects proposed in the treatment, in Eberle's Practice—a work which has had so large a share in forming the opinions of medical men and shaping their practice: "In the treatment of this disease, there are three primary pathological conditions, according to which the general indications of remediate management must be directed, viz: 1. Functional derangement of the liver and alimentary canal. 2. Redundancy of morbid or vitiated secretions, and consequent irritation in the intestinal tube. 3. An irritated increased action of the heart and arteries. Hence, the principal indications in the treatment are: 1, to moderate the febrile reaction of the arterial system; 2, to remove out of the alimentary canal, the vitiated and irritating secretions which may be lodged in it; 3, to restore the healthy functions of the liver and alimentary canal; and 4, to obviate gastro-intestinal irritation." Among the methods of treatment, not a word is said of an effort to arrest it.

In Dunglison's practice, the whole routine system of bleeding,

puking, purging, sweating, refrigerating, blistering, &c., is examined, but not a word as to the abortive treatment.

The writer turns to the treatment of Remittent fever in a work published in 1846, by Dr. Clymer, whose aim has been, "to adapt it particularly to the necessities of the American Practitioner," and reads—"The indication of treatment in Remittent fever do not materially differ from those of continued fever. The points more particularly to be attended to, are the reduction of the general fever, the obviating the effects of congestion and inflammatory action in the liver," and other organs. In a note, we are informed, that the simple expectant plan, is the one, which has been generally of late recommended by the experienced! At the end of the note the indication is stated, in the Congestive fever, to prevent the recurrence of the paroxysm.

In Watson's Practice by Condie, Remittent fever forms the subject of a note—in which it is announced that the most important question that presents itself in the treatment is the propriety of direct depletion by the lancet! And in Professor Dickson's Lectures, commended especially to the Southern student and practitioner, there is the same minute remark upon bloodletting, emetics, cathartics, calomel, cold, &c., &c., but not one word upon what must be regarded as the leading rational object—the checking of the paroxysm. Indeed upon this point, the necessary continuance of the disease when once formed is distinctly, though incidentally asserted. "Could we reasonably hope to prostrate the disease by a single blow, as is often done in the cure of the phlegmasiæ, in pleurisy, &c., we might more implicitly trust to the lancet; *but the case is far otherwise.* Here the atmospheric and climatic predispositions are permanent, and the poisonous cause is still diffused around the patient, impressing the tissues with a continuous and UNAVOIDABLE agency. Success does not depend upon, nor can we hope or expect to attain it, by any single measure, however judicious and energetic."

In Professor Chapman's Syllabus, by Kennedy, published in 1846, quinine, the specific remedy for jugulating Remittent fever, is classed among the *adjuvants* of the old routine system of practice.

And in Bell & Stokes' Practice, even in the latest edition, although the efficacy of the quinine practice is fully shown—the early unconditional use of quinine plainly set forth and triumphantly vindicated, yet in the treatment of the milder forms of remittent, this cardinal object of checking the recurrence of the paroxysm is not

even hinted at. The writer, however, in passing, would pay the tribute of his high respect to the author of the articles on paroxysmal fevers, in this work; and express his sense of the obligations of the profession and of society to that author, for the general diffusion of modes of treatment, so admirably calculated to check the mortality of that hitherto fatal and always dangerous disease, congestive intermittent and remittent fever.

But where the propriety of confining the use of quinine to Congestive Remittent fever?—where the propriety of allowing simple remittent to run its course unchecked, whilst we hold in our hands a remedy so safe, so gentle, so certain as the sulphate of quinine? If it have the power of arresting the paroxysms of *malignant* remittent, in which, on the Remittent fever is superadded the disturbing influences of extensive congestions and local inflammations, surely it must be able to control and arrest the *simple* form; and if so, there can be no propriety in allowing it to run its course unchecked; for who, that has lived where remittents are endemic, does not know, that a malignant paroxysm often supervenes, after many paroxysms of a mild and simple character; and that this paroxysm is dangerous in proportion to the previous duration of the fever: and, further, that simple remittent often lapses off into the typhoid state, to the imminent danger of the patient. Why run the hazard of these dangers by allowing its continuance?

*To prevent the recurrence of the paroxysms—to jugulate the disease.*—An analysis of the symptoms points to this then, as the prominent object, in every stage and every degree of the disease, as long, at least, as it preserves a paroxysmal character. Whilst it generally happens, that opportunity is afforded for the use of depletion, by bloodletting and other evacuations, during the paroxysm, yet the pathology which teaches that the Remittent fever is the main affection, forbids us to allow the first remission to pass without attempting to accomplish this primary indication, even if evacuations may not have been previously employed. This object may be accomplished by the use of sulphate of quinine—universally acknowledged to be the specific of Intermittent fever, indicated also, as the specific of Remittent, by the fundamental similarity of these two affections, and known to be so, by all who have thus used it. The interval between the paroxysms being shorter than in the intermittent form, the doses must necessarily be larger, in order to administer the



requisite quantity, before the period of the next accession—from five to ten grains, hourly, according to the length of the remission, to the extent of fifteen, twenty, or fifty grains. For in determining the quantity, the rule laid down in the treatment of malignant intermittents, serves for the guide here, viz: the quantity to be directly proportioned to the degree of danger apprehended from the coming paroxysm; thus, in malignant remittents, the largest, and in simple remittents, the smallest quantity.

The writer must be content with stating the result of his own experience, in this mode of treatment: that generally it checks the first paroxysm, almost universally the second, in the milder forms of the disease—that the average time of attendance upon such cases is about three or four days—that, when the quinine fails to arrest a coming paroxysm, it mitigates its violence, shortens its duration; and although in some rare cases, the nervous symptoms produced by the remedy, are distressing to the patient, during the paroxysm, these are soon relieved by the treatment appropriate to this state—that he has almost forgotten the features of the typhoid state of fever, so painfully familiar to him, previous to the last twelve years, when using the treatment then generally taught by authority and sanctioned by the profession.

Of this result the writer would say—those who have not fairly tried this mode of practice, have no right to question the justness of his conclusion—those who have, he confidently believes, will confirm it.

The writer does not undervalue the minute estimation of the circumstances, under which bloodletting, emetics, cathartics, mercurials and others, should and should not be used, which is to be found in all the works on Practice; yet he declares his conviction, that the practitioner, holding steadily to this prominent indication, will find little need of availing himself of such instruction—that in the great majority of cases of simple Intermittent fever, by the use, during the paroxysm, of bloodletting or not, and of that safest and surest emetic, water, (cold or warm, according to circumstances,) ingested into the stomach in such liberal quantities as to produce detergent vomiting, and this followed by a large saline injection to evacuate the bowels, and sinapisms to the vertebral column; the comfort of the patient is better secured, than by the administration of much physic, until the time arrives for the administration of the specific. If after the subduction of the fever, there remains the evidence of disease in the

liver or stomach or bowels, then this may be corrected by appropriate remedies, more readily, more safely and effectually than during the fever. The writer would insist upon this subsequent treatment of any remaining disease, as a necessary part of this abortive treatment.

How totally different the treatment here recommended for incipient Remittent fever, from that in recently published books of Practice, may appear by the following quotation from Professor Dickson's, issued as late as 1845 :—"During the Remission which the management above detailed as requisite throughout the course and progress of the exacerbation is intended to hasten, to render more perfect, and to prolong, you must not allow your attention to your patient to slacken. Nay, you are now called upon, perhaps, for a still nicer and more assiduous exertion of diligence and skill, as the improved circumstances often afford a better opportunity of useful interference. Purgatives, if formerly rejected, will now probably remain upon the stomach and act kindly. Diaphoretics, too, are less apt to nauseate, and may be exhibited in fuller doses, and procure a more free and diffused sweating. It is thus that you may hope to diminish the violence of the returning exacerbation, if you cannot altogether prevent it. To subtract as much as possible from its intensity, time the administration of your prescriptions so as to bring your patient most completely under their effect, freely operated on by your purgative, fully sweated by your sudorific, just at the period of its expected invasion. Let his windows then be darkened, his apartment kept fresh and cool by ventilation, and, if necessary, by evaporation, sprinkling his floor with water, vinegar, or ardent spirits, and prevent any excitement by noise or by conversation with him. It is always advisable farther, to meet a coming exacerbation with revulsives so applied as to counteract or diminish the local determinations to important organs." The writer declares his greater confidence in the silent operation of fifteen or twenty grains of quinine, during the remission, in the absence of the physician, than in the strictest *surveillance* of a whole College-faculty, armed with their Cathartics, Sudorifics and Mustard-plasters.

The value of this treatment, if it be as successful as herein declared, will be the more highly appreciated, if we consider, at one view, the various terminations of Remittent fever of the milder kind—that the most favorable is in convalescence at the end of a week or ten days, after the patient shall have undergone, not only all the anguish of fever, but in addition thereto, the annoyance of emetics, cathartics,

nauseous sudorific draughts, perhaps ptyalism, perhaps flaying with vesicatories, and moreover, agitated, day after day, patient and friends, by the uncertainty of the final result—that another termination is the unexpected development of a malignant paroxysm, almost uniformly fatal, certainly so, with the continuance of the treatment which permitted it—that another is, the gradual loss of the remitting character and the establishment of the typhoid state, not as uniformly fatal, but imminently dangerous. The abortive treatment secures an early convalescence, saving the patient many days of vexation from fever and physic, with his strength but little impaired by depletion—it secures him from the hazard of a malignant paroxysm—from the doubtful issue of the typhoid state—doubtful under any of the many modes of treatment; and it will never impose upon the physician the fearful alternative of allowing the disease to run its course towards a doubtful issue, or to adopt a heroic course of mercury, which may end in salivation—an artificial disease, infinitely more annoying and of longer duration than the one it may have substituted—which may at last end in the loss of the patient's teeth or of his lips or of his life. Fearful indeed is the choice of the latter alternative; and far better, that the profession should lay under the reproach of impotency to save human life, than the more terrible one of sacrificing it.

When it is remembered that Remittent fever is the endemic disease of Southern climates, the necessary exposure of the population in the summer and autumn, and the universality of its attacks, and the high rate of its mortality, under every mode of treatment hitherto adopted, and if the success of the abortive method has been here truly represented; then it may not be deemed extravagant to say—that its universal adoption throughout the Southern country, would confer blessings, within that sphere, proportionate to those conferred upon the world, by the discovery of Vaccination. It is gratifying to know, that it is fast winning its way to this universal adoption; and the claim to the honor of diffusing the knowledge of this treatment, in this region of the Southern country, set forth in behalf of the Medical College of Georgia, by Professor Dugas, in his recent introductory lecture, is unhesitatingly endorsed by the writer. Here, the principle of this method was distinctly and publicly announced, as early as 1836, and ever since, its alumni, fully indoctrinated in the principles of this method, scattered through this and the neighboring States, have freely used the influence, which their unprecedented



success in the treatment of bilious fever, has secured to them, in extending the same principles far and wide among their brethren of the faculty. It wins its way readily to the willing and candid enquirer, and *compels* the assent of the reluctant.

2. *To moderate the violence of the paroxysm.*—If the congestions and inflammations manifested with increased violence during the paroxysms are accidents, they do yet materially affect the issue of the case, and must command attention. But it is not the intention of the writer, at present, to enlarge upon this part of the treatment, the circumstances under which the various means of the antiphlogistic method may or may not be used, having been so judiciously defined in the works on Practice. It was his intention to have added cases, to show how fairly the principles of pathology and practice, here advocated, are deduced from facts; but circumstances forbid the extension of this article.

---

ARTICLE IX.

*Observations on various Diseases.* By ROBERT EDMONDS LITTLE, M. D., of Quincy, Florida.

We trust that no apology will be deemed necessary for the publication of the following notes: they were made at the bedside—the only situation in which disease can be read with fidelity; and although they may by many be esteemed tiresome, they are presented with the hope that others may be induced to follow up the plan of observing for themselves, and not rest altogether contented with the delineations of theoretical systematists; and although we recommend the accumulation of facts as the basis of excellence, we would not be understood as desiring to abandon inductive reasoning. Facts and speculations are mutually dependent on each other—for without theory facts would be of little value; while on the other hand, in the absence of facts, speculation would be positively harmless: a just appreciation of both cannot fail to render the intelligent observer an ornament to the profession—a benefit to society

*Abscess of the extremities, the result of constitutional irritation.*—The influence exerted by constitutional derangement in the production of local diseases is acknowledged by all; and although this is

more particularly witnessed in the progress of febrile diseases, we have in some few instances encountered a severe form of abscess of the extremities, induced, we have every reason to believe, by a peculiar condition of the general system, the contour of body, presenting many of the characteristics of good health; yet on more close examination defects may be perceived by the professional man which would altogether escape the notice of the superficial observer. As to the relationship existing between this condition of the system, which we shall hereafter notice, and the disease in question, we are not perfectly satisfied—yet so far as our observation extends, they are concomitant; and as it is not our design, through force of imagination, to convert fancies into facts, or to substitute one for the other, we shall present our observations through the medium of cases, leaving the reader to put whatever estimate upon them which experience and judgment may dictate.

—, a boy, eight years of age, in the beginning of September, 1844, without any apparent previous indisposition, complained of a severe pain in the region of the external malleolus of the right leg; but as he was subject to what is denominated in the southern country “toe itch,” little attention was paid to his complaints, until the foot and ankle had become considerably enlarged. The swelling increased so rapidly that within thirty-six hours the leg, from the knee down, was enlarged to double its natural size, presenting a tense shining appearance. Various domestic remedies were resorted to prior to paying me a visit, but without any mitigation of either pain or swelling. Nine days from the commencement of the disease he was brought in a carriage to my office. Although no fluctuation could be perceived, we determined to puncture the most prominent point on the leg—accordingly a deep incision, an inch in length, was made immediately over the external malleolus, from which escaped six or eight ounces of pure pus, with the effect of procuring instant relief from the extreme pain under which the little patient had labored for more than a week. With the design of arresting the inflammatory action, the tincture of iodine was directed to be applied every twelve hours over the whole limb, from the knee down—at the same time a mild antiphlogistic course was pursued. For several days the tincture of iodine was continued, without any other effect than that of slightly arresting the progress of the disease. The inflammatory action, after a temporary arrest, again commenced its march, attacking and destroying the skin and cellular substance, so as to leave fully

exposed to view, the external malleolus of the fibula, the astragalus, the anterior fasciculus of the external lateral ligament attached to the astragalus, and a portion of the middle and fasciculus attached to the os calcis and astragalus. From the appearance of the pus discharged, it was apprehended that a carious bone was the cause of the continuance of the disease. A minute examination was made, which resulted in the discovery of the carious condition of the astragalus, which was easily removed. We were unable to detect any thing like disease in any of the other tarsal bones, and a speedy recovery was anticipated, from the effect which the treatment adopted seemed to produce—an anticipation which was not destined however to be realized. The external use of the tincture of iodine, various kinds of injections, and the bandage, were all tried, with the effect of causing the cavity to fill up, and an almost entire disappearance of the discharge. Notwithstanding the favorable progress of the case, on a sudden the sore again assumed an unhealthy appearance, with an increase of the matter discharged. Convinced that this diseased condition of the parts depended on some state of the system of which we were not cognizant, a more vigorous course of general treatment was adopted, although, in connection with the local treatment, measures for improving and invigorating the little patient's health had not been neglected.

Having observed the good effects of tonics, and especially those of a ferruginous kind, in the treatment of the diseases incident to children in this latitude, and as our patient exhibited many of the symptoms characteristic of serous polyæmia, he was subjected to a tonic course of treatment—at the same time the local use of iodine was resorted to. He was allowed a generous diet of animal food, and two pills, each composed of three grains of aloes and the sulphate of iron, were administered night and morning. Under this course, pursued for a week, we had the satisfaction of perceiving an improvement, not only in the general appearance of the patient, but also of the ulcer, which had entirely healed. A slight deformity only exists in the ankle joint, and he is now using it with as much facility as he does the opposite limb.

Since the dismissal of the patient, we have had two cases of a precisely similar kind, in one of which the disease attacked the fibula, and in the other the os calcis, both of which bones were exsected. In each case, the usual remedies were used in vain, and the aspect of the disease changed, not until the treatment similar to that resorted



to in the first case was tested. From the circumstance of all three cases occurring in boys, having the same characteristic symptoms of a depraved condition of the general system, and the inefficiency of the usual mode of treatment, and the success of the one finally adopted, the conclusion as to a relationship existing between the forms of abscess and a sero-polyæmic disposition is to our mind clear. To others, the coincidence may appear accidental; yet, so well are we convinced to the contrary, should other cases present themselves to our consideration, our treatment would be almost wholly constitutional, and we should expect success to be in a direct ratio with the perseverance maintained.

A remark as the extent to which the preparations of iron, and especially the sulphate, may be persevered—In large medicinal doses, it is said to produce pain, heat and other uneasiness, at the pit of the stomach, and not unfrequently nausea and vomiting. We have used the article very extensively in the treatment of a variety of affections, and can confidently assert that in fifteen and twenty grain doses, (having frequently extended its use to that quantity,) we have never observed any thing of the kind, even when used daily for weeks, save in a few irritable systems. In small doses of from one to five grains, it may prove astringent, but in large doses we always anticipate from its use an aperient action on the bowels. These observations as to its action, are the result of an extensive acquaintance with the remedy.

*Case of Ischuria Renalis, in a mulatto; in which the secretion of urine was suspended entirely, for several days—Recovery of the patient.*—The following remarkable case of this most dangerous disease occurred in our practice several years ago, and is presented with a view of showing to what extent the malady may progress and yet terminate favorably. The patient, a mulatto girl, about eighteen years of age, was visited for the first time, on the 11th day of Nov. 1843. She complained of pain in the head and back, and constipated bowels; her pulse was full and strong, and the temperature of the skin very much increased. She was bled to the amount of twelve or fourteen ounces, and an active cathartic ordered. For the two subsequent days she was entirely free from any symptoms of disease, but on the third she complained of vertigo and excessive pain in the lumbar region, and for the first time disclosed the scanty secretion of urine, not more than a half-gill being secreted in the twenty-four

hours. Towards evening the sensorium seemed affected; the patient being drowsy evinced an indisposition to exertion of any kind; the eyes yellow and suffused; pulse slow and full; with a slight tendency to stiffness in the limbs. The catheter was introduced into the bladder, but no urine was discharged. The symptoms indicating the abstraction of blood, eighteen ounces were drawn from the arm, a mercurial cathartic administered, and a blister applied to the lumbar region. *From this date, the 14th, until the 24th, not a drop of urine passed from the bladder*, although the catheter was introduced daily. During the whole of this time, the sensorium was more or less affected; the patient at one period was delirious, and again apparently comatose. On the 16th, she was attacked with stiffness of the limbs, which increased until the fore-arm became flexed, the fingers closed on the palms, and the legs spasmodically extended, when the paroxysm would gradually disappear after a continuance of some two hours. The paroxysms recurred at irregular intervals for about three weeks, several days after the secretion of urine was restored. During a paroxysm, the whole muscular system seemed to be affected—the face flushed—the pulse full and hard—the skin hot and bathed in profuse perspiration; but towards its termination, an opposite state of things would prevail, and the patient awake up, completely prostrated in mind and body. The high state of excitement under which she labored, induced us to resort to venesection, the warm bath, &c., but without effect; in fact, all the remedies used appeared rather to increase than diminish the violence of a paroxysm. At last, an unusually severe paroxysm having occurred on the 24th, recourse was had to an enema of tobacco, made by infusing two drachms of tobacco in a pint of boiling water. In a very few minutes after its administration the patient became intensely sick, and made violent efforts to vomit, while the rigidity of the muscular system speedily disappeared. It became necessary to repeat the injection daily as long as the spasms continued. Immediately after the close of the paroxysm on the morning of the 24th, the patient complained of fulness in the supra-pubic region; the catheter was introduced into the bladder and six ounces of pure pus, without any admixture of urine, were discharged. In the evening, about two ounces more were drawn mixed with urine—the first she had passed since the 14th, a period of eleven days. From this time her improvement was manifest, the spasms becoming less frequent and violent, and the urine increasing in quantity, until about the middle of December, when she was discharged as cured.

The foregoing case is certainly remarkable for its duration; as very few cases of this sure and usually fatal disease are extended beyond the eighth or ninth day, death most commonly terminating the patient's sufferings even before that period. So far as we are aware, the period of time between the cessation and the reappearance of the secretion of urine, is longer than that of any recorded case, in which recovery took place.

The administration of tobacco for the relief of spasm of an hysterical and tetanic nature, although of ancient origin, is not, we believe, general with the profession. Its use in the present instance was of undoubted utility, as was evinced by its power in controlling the paroxysms, after other remedies had failed, and in several instances since we have observed its good effects. The cases in which we have exhibited the tobacco, were such as were possessed of a vigorous constitution, with a full, tense pulse, and in short all the evidences of high arterial excitement. To such, and such alone, is the remedy applicable. Cases of an opposite description we need not say would be injured instead of benefited by its administration.

*Hæmatemesis, the result of diseased liver; death; inspection.*—Within the last three or four years, we have met with several cases of this form of disease; all of which occurred in individuals whose constitutions were impaired by dissipation. Two of the cases terminated fatally, and of these two, only one was examined. The subject of this case was a man aged about forty years, and of dissipated habits. For three months before his death he was confined to the house, the subject of ascites, from which he had in a measure been relieved, when he was suddenly attacked with vomiting and purging of blood, in small quantities, however, which continued for three days notwithstanding the use of appropriate remedies, when the patient expired, completely exhausted from loss of blood.

*Autopsy, eight hours after death.*—The lungs were found healthy; heart soft and flabby; stomach and small intestines very vascular, and containing a quart of dark coagulated blood; the liver presented an irregular appearance, and was evidently very much diminished in size. When cut into, small globular bodies were seen, divided by partitions of a fibrous character; the former probably the acini in a state of enlargement, and the latter the cellular tissue thickened. Its peritoneal covering was altered in structure, being thickened and of a darker hue than usual. The weight of the organ was diminish-



ed, while its blood-vessels were much lessened in size, in many points obliterated.

From the above appearances, the pathology is easily understood: an impediment to the vena porta discharging its contents into its proper reservoir, inducing congestion of the branches forming this vessel, and as a consequence, the hæmorrhage.

(TO BE CONTINUED.)

---

ARTICLE X.

*Application of Creosote to the treatment of Diarrhœa and Dysentery.*

By J. A. MAYES, M. D., of Sumter District, So. Ca.

In the October number of this Journal, for 1846, I reported two cases of protracted Diarrhœa, which yielded in a very short time to the internal use of Creosote, after resisting all other remedies which had been prescribed. The success which attended its administration in these cases, encouraged me to make a more general application of the article; and, though opportunities sufficient have not occurred for making any extensive trial, yet the result of its employment has been to give me a most favorable opinion of its efficacy. For the purpose of inciting others, more competent than myself, to the task of making a full investigation of its therapeutical action, I offer below the result of my experience with the creosote in the treatment of diarrhœa and dysentery.

The form of diarrhœa to which creosote appears particularly applicable, is that, unaccompanied by much pain and febrile excitement, but which, after the operation of a mild aperient requires the use of absorbents and astringents to check the frequent watery alvine dejections. These cases are common enough, and the physician is seldom called in to prescribe for them; never, indeed, unless the diarrhœa resists for some time, all the various astringents used in domestic practice. In such cases, I can confidently recommend the creosote as being speedy and certain in its effects; restraining the discharges, but not producing constipation. This effect has been produced in all the cases in which it has been prescribed, and is in my opinion its chief recommendation. Every physician knows by experience, that after the use of the ordinary astringents, catechu, kino, briar root, &c., considerable difficulty is

found in restoring the bowels to their natural state; more or less constipation resulting from their use. I have not yet observed constipation to be produced by the creosote, and should its effect in all the cases in which it may be hereafter prescribed, be that of simply diminishing the frequency of the discharges, it will, of course, be ranked as an important adjunct in many cases, and in a great majority of cases, the principal remedy.

As a general rule of practice, I would prescribe the creosote, either alone or in combination, in all cases of diarrhœa, after the operation of a mild aperient. This aperient, I recommend, for the purpose of removing from the bowels all irritating matters; since the disease is caused oftener than otherwise by the presence of imperfectly digested food in the bowels, or by the ingestion of unwholesome substances, as fruit, unripe, or in the incipient stages of decomposition. As a remedy in the bowel affections of children, the creosote is worthy of attention; the smallness of its dose, and the consequent facility of its administration, being of itself a matter of importance, and so far as I have noticed children make very little objection to it, but take it readily notwithstanding its disagreeable odour.

CASE I. A child, under my care at this time, had been laboring under diarrhœa, about two months; the cause of the disease being evidently the irritation of dentition. The symptoms, in this case, were by no means alarming, and presented no peculiarity worthy of note. After prescribing several of the more common astringents with little or no benefit to the patient, I directed the following prescription: R. Gum Arabic, ʒi.; loaf sugar, ʒi.; creosote, iv. gtt.; water, ʒii.—mix intimately in a mortar. A teaspoonful three times daily during the continuance of the diarrhœa; and once daily for some time afterwards, as a prophylactic. I prescribed the creosote in this case without much confidence in its efficacy, and I did not believe the remedy had the power of calming the irritation which caused the disease; but, contrary to my expectations, the medicine acted very promptly, arresting the disease in the course of twenty-four hours: and up to the time of writing this, (nearly three weeks after the prescription was given,) there has been no return of the disease.

In dysenteries of high inflammatory action, fever, strong and full pulse, I have not yet ventured to prescribe the creosote until those symptoms were overcome by other means, though I am inclined to think that a cautious use of it, would be productive of advantage. We frequently, however, meet with cases, attended by great pain and

tenderness of the bowels, constant griping and disposition to stool, but with little or no fever: in such cases, I would prescribe, at once, the creosote in combination with opium, without any fear of unpleasant consequences.

CASE II. Miss M. G—— was attacked on the 20th of September with dysentery. For the first two or three days she had high fevers, but afterwards the fevers were light, constant nausea and occasional vomitings—incessant griping, frequent but small bloody discharges from the bowels, &c. She had taken several doses of castor oil—herb teas of various sorts, burnt brandy, and a variety of other articles. Her disease did not appear to yield to such remedies, and on the 26th I was called in to prescribe for her.

Found her suffering great pain throughout the abdomen, bowels very tender under pressure, constant disposition to vomit, griping almost incessant, bloody discharges small but very frequent, little or no fever, the pulse being rather too frequent, but soft and compressible, tongue furred, and rather dry—excessive thirst. *Prescription.*—*R.* Opium viii. grs.; creosote v. gtts.; powdered liquorice sufficient to make eight pills—one to be taken every three hours, and after the last pill, a dose (table-spoonful) of castor oil—a strong pepper cataplasm, large enough to cover the whole abdomen, to be kept constantly applied—mucilage of slippery elm to be drank very freely.

27th. Found my patient to-day much improved; very little pain and tenderness of the bowels, bloody discharges had ceased after the third pill yesterday, little or no thirst, pulse not too frequent, skin warm and moist—castor oil had operated once, discharge very dark and appeared to consist chiefly of coagulated blood. *Prescription.*—*R.* Opium viii. grs.; creosote v. gtts.; liquorice powder sufficient to make twelve pills—one to be taken every four hours; slippery elm as before.

29th. Patient doing well. No further treatment thought necessary, but the diet to be properly regulated.

It may be well to remark here that this patient was attacked a few days afterwards with intermittent fever of the quotidian type. One active purge was administered in the course of the treatment, but there was, in consequence, no disposition of her former disease to return; quinine and ext. cinchonæ, soon restored her to good health.

CASE III. W. H. C—— was attacked by bilious remittent fever on the 30th October: the fever was ushered in by severe rigors which lasted three or four hours. The most prominent symptoms during



the course of the fever, were severe headache, pain in the right side, and nausea. These symptoms did not abate much until the first apyrexia, which occurred on the 1st of November. Quinine then arrested its course, and the prospect of a speedy recovery was very flattering. On the 3d of November, however, he was attacked with dysentery. Being recalled to prescribe for him, I found him suffering great pain in the bowels, griping incessant, frequent but small bloody discharges from the bowels, no fever, pulse soft and compressible, skin rather dry—had taken two doses of laudanum, 25 drops each; the last dose about three hours before I arrived, but no abatement of the symptoms had been perceived. *Prescription.*—℞. Opium v. grs.; creosote iii. gts.; powdered liquorice sufficient to make six pills—one to be taken every three hours, and a table-spoonful of castor oil after the last pill; warm cataplasms to cover the whole abdomen, and the free use of mucilaginous drinks.

Nov. 4th. Found my patient perfectly relieved—castor oil had operated, bringing off a large discharge of dark matters, resembling coagulated blood mixed with mucus. Directed the mucilages to be used as before; diet mild and unirritating. His recovery was very rapid, and he has since enjoyed very good health.

The form of administration, I prefer, is that of emulsion, made according to the formula above; though in many cases the form of pill is preferred by patients. The average dose for adults is about half a drop, repeated *pro re nata*; for children  $\frac{1}{8}$  to  $\frac{1}{4}$  of a drop.

In "Dunghison's new remedies," I find the dose recommended to be about one or two drops. This quantity, for ordinary cases, seems to be too large, and my experience, as seen above, is decidedly in favor of smaller doses. Administered in combination with opium in painful dysenteries, the effects of both appear to be increased, as the relief afforded is generally much quicker than could be expected from either alone.

A great deal of the discrepancy of opinion concerning creosote amongst writers on the subject, has probably arisen from the quantities administered at a dose. Thus in vomiting, not proceeding from inflammation or organic disease, some eminent physicians affirm it to excel all known medicines: others derived no advantage from it; and Dr. Dunghison remarks that, "in many cases, indeed, it has developed irritability of the stomach, where it did not previously exist." My own opinion is, that this difference of opinion is caused by the doses administered being too large in those cases where it failed or

developed irritability. Having had no experience with the article in those cases, of course, I am not prepared to speak positively; but I would recommend to all who prescribe the creosote, the use of fractions of a drop to commence with, as the prospect of obtaining favorable results is much better when administered in small doses than in large. Creosote being, as is well known, a powerfully acrid substance, no surprise need be manifested when it is asserted that it produces irritability of the stomach in doses of two drops.

In the foregoing remarks, I have endeavored to give the result of my own observations, unbiassed by any predilection in its favor, or by the favorable reports received from others. Whether the favorable opinion I have formed of the powers of creosote as a remedy for diarrhœa and dysentery, will be confirmed by time and experience, remains yet to be seen.

---

## PART II.—REVIEWS AND EXTRACTS.

*Some Remarks on Camp Diseases in Southern Climates.* By SAMUEL A. CARTWRIGHT, M. D., of Natchez.—(New Orleans Medical and Surgical Journal.)

War and Medicine are more closely allied than is generally supposed. Many of the greatest armies have been ruined in a few days by diseases that might have been avoided. Unfortunately it is too common for commanders of armies to look upon physicians as mere prescribers of pills and powders, and to take for granted that they have nothing to answer on the great questions connected with extensive military operations. Although many of them have not, yet it by no means follows that the science of Medicine is limited by the bounds of their knowledge. The first step in the science, is to learn to cure such diseases as are curable; but a higher to learn the secret of preventing them. Health is indispensable to the efficiency of an army, particularly a large one. Without health, "numbers effect nothing, but multiply distress." The case is worse if the army is far from home, in an enemy's country, and strangers to the climate and its influences. In such a case, the secret of preventing disease, can seldom be found by the commander of the army alone, unless he is aided by the light of medical science. Captain Cook, who sailed round the world so often, and kept his crew healthy, at a time that scurvy was destroying whole fleets, had learned the secret, so important for every commander to know, of preventing disease. He knew nothing about curing diseases, i. e., he was no doctor, in the common

understanding of the term, but he was a great physician in regard to preventing disease. He borrowed light from Medicine, and reflected light on the science he borrowed from. Physicians studied Captain Cook like a medical author. His discipline, his dietetics, hours of rest, and every thing that passed on board his ship, was studied. Aided by his book, physicians soon banished scurvy from the navy. The camp dysentery is as much the plague of large armies on the land, as the scurvy ever was to mariners. King Henry V. invaded France with fifty thousand men, in August. In September, the camp dysentery swept off nearly half of them, and so disabled the balance, that a disgraceful retreat was the consequence of King Henry's not having learned the art of preventing disease. In 1792, the hundred thousand Austrian and Prussian soldiers, who invaded France, were, in one short month, so much disabled by the dysentery, as to be unable to do any thing but retreat. The dysentery has been an attendant on all military operations, on a large scale, in every instance where the commander has not learned the secret of preventing it. That disease alone, the last century, has destroyed more soldiers than all the weapons of war that have ever been invented. That science which is too poor to cure a single case of organic disease, an ulcer in the lungs, for instance, or any disorder of structure in a part essential to life, is rich in materials for preventing diseases among armies, and curing them promptly when they happen. The disease of armies are nearly all functional, not structural, as they often are in private practice. Those who have any organic or structural derangement are not received as soldiers. The young and vigorous fill up armies. Their diseases are nearly all owing to derangement of function, not structure, and are mostly curable when they happen, and by proper management can generally be prevented from happening. Too low an estimate will be put upon the value of the science of Medicine to armies, to judge of it simply by the curable and incurable cases in private practice. Thus, a physician in private practice must, from necessity, lose every case of confirmed consumption, and every case of dysentery, or other disease connected with any organic derangement of structure essential to life—but the same physician could cure every case of cough, and every case of dysentery, occurring among soldiers, because he has no organic derangement to contend with, their diseases being all functional; that is, some organ has become deranged from some temporary cause; it is whole and entire, but cannot perform its functions from some temporary obstruction. In private practice such cases are readily relieved under almost any kind of treatment, or will generally get well, after so long a time, by the efforts of nature, under good nursing and the comforts of home. Not so in the army. They are deadly without the timely and judicious aid of medicine. At home, under ordinary circumstances, the measles are not commonly fatal with or without treatment. In the army it is deadly without treatment—and deadly with it unless directed by a physician acquainted with its new laws under the new circum-



stances. The same may be said of dysentery, and bilious fever. If these, and similar diseases, occurring in the army, are not promptly cured, the fault does not lie in the science of Medicine, but in the physician not having studied the science thoroughly, or in the commanding general not aiding norabetting him in the treatment. The rapidity with which disease, particularly dysentery, spreads through a camp, in southern latitudes, often strikes terror into the stoutest hearts. Far from home, and deprived of all the comforts of home, as soon as the soldier finds himself helpless by disease, he loses the man and becomes a child; a feeling of despondency comes over him, unless he has some one to look up to as a protector in his weakness. Fear or despondency will baffle the best directed treatment of the physician, unless the commanding officer drives fear from his camp by winning the affections of his soldiers. If the soldier finds that his officer takes a deep interest in his welfare, he neither fears nor desponds. General Jackson walking and a sick soldier riding his horse dispelled fear and despondency, not only from the favored sick man and all others on the sick list, but also acted as a preventive of disease in those who were well. One great secret of preventing disease among soldiers, is "to keep the vital and animal powers in uniform confederacy." Fear, like a bad diet, want of comfortable clothing, or over exertion, lowers the vital energies, and opens wide the door to diseases of all kinds—particularly dysenteries and fevers. When bad diet, want of tents, and clothing, and over exertion, have been encountered, and no sickness followed, physicians have only to read attentively the history of the commanding general, on those occasions, to read Medicine. Napoleon had the power of preventing disease, in an eminent degree, by infusing his spirit into his soldiers, and making them feel as he felt, and thus enabling them to resist the natural causes of disease—fatigue, hunger, and exposure,—by supplying them with a mental stimulus to make up for the want of the usual animal stimuli, as food, drink, sleep, and rest. If, under great privations, without tents, clothing, or a regular supply of food, and under forced marches, in inclement weather, disease can be prevented by the commanding general, how much more can it be prevented in the ordinary circumstances of camp life? But it is chiefly in what might be called camp luxury that sickness is most rife. Good tents, a plenty to eat, and nothing to do, is sure to bring on disease unless the commander adopt measures to counteract it, by giving his whole attention to the subject of preserving the health of his soldiers. When an army is on the march to meet the enemy, the *amor patriæ* closes up the avenues to disease, but when encamped the love of country is not so strongly felt, and hence one powerful brace against morbid influence becomes relaxed. Besides, the malaria, or effluvia, arising from a great number of men, stationary, particularly in warm weather, become a cause of pestilence. Those commanders who will not open their eyes to the recorded medical proofs of this source of disease, will see their men suffer much unnecessary evil, which could

easily, in the most of cases, have been avoided, by moving the camp half a mile, or a mile, before the air around it had time to become pestilential. Pestilential hospitals are also the prolific causes of unnecessary sacrifice of human life in an army—and want of sufficient nursing another. If a sick man has a friend, (and most of them have,) that friend had better be permitted to attend to him, if his services can be dispensed with; not so much as a drudge nurse, as to see that the disabled soldier has every comfort his situation will admit of. Measures to find out the particular friend of each individual on the sick list, could be taken without putting the commanding officer to much trouble. Men recover much quicker from sickness in booths or sheds, with only something to keep the sun and rain off, than they do in large hospitals, or where many are crowded together. The success in treating diseases in the large European hospitals, is very indifferent. The most bungling country surgeon in America has better success with operations, than the most skilful European operator. The foul air of the hospitals, and the pure air of our American cabins, makes the difference. There is such a thing as dodging a disease. The history of armies affords many instances of a short removal, only a few hundred yards, being sufficient to cut short the pestilence, whether cholera, fever, or dysentery. The want of sufficient attendants to prevent the sick from making exertion, is a great evil. The sick soldier should be made to husband his strength, and not waste it by getting up, or making unnecessary exertion. It would be all the better if he were not to leave his bed from the time he is taken sick until the disease comes to a crisis. In private practice, in acute diseases, *absolute* rest is very important, but in hospital practice much more so. Many lives are lost by the soldiers resisting the disease, and not giving up in time. I found when I was in the army against Great Britain, last war, that the majority of the soldiers had a holy horror of a hospital, and would hold their places in the ranks when they ought to have been a-bed. When they did, at length, yield, their chance of recovery was much diminished, the disease being so firmly fixed on them. I think the usual course, of sending every sick man to the hospital or calling a doctor to see him, a very injudicious one. In the army, diseases, for the time being, are all generally alike, requiring the same treatment. I mean when there is much sickness prevailing. The physician could make known what was the first medicine to begin with. When the soldier complains, he should take the first dose on the spot, and lie down in his tent without going to the hospital. If he did not get well, it would be time enough to go to the hospital when it was ascertained the disease was about to prove obstinate. I found, by experience, that soldiers often secretly attempted to cure themselves by taking medicine of their own, and not reporting themselves, so fearful were they of the hospital. If a soldier knew that he would not go to the hospital until a trial to cure him in his tent had failed, he would not be so backward in letting his indisposition be known in time. If also the

formality of being examined by a physician, could be dispensed with there still would be less reluctance to give up in time. The importance of yielding or giving up to disease at its first onset should be duly impressed on the mind of the troops in order that recovery might be speedy. The diseases of autumn are marked by more debility than in any other season and they generally do not bear bleeding or evacuating remedies well. A serious and hard spell of sickness, disables a soldier too much to be of any service in the campaign—so far from being useful, he is in the way. How necessary, therefore, to prevent long spells of sickness, by attacking the disease before it has got too firm a hold. It would be well, also, for the commanding officer to bear in mind, that new troops, or any other kind of troops, cannot endure as much exertion in a warm as in a cold climate. Discipline, with new troops, should not exceed the proportion of exercise necessary to health. All over exertion or excessive fatigue should be avoided, or reserved for an important object. All drudgery should be avoided as much as possible, or be performed by negroes, or the natives of the climate. The wisdom of such a measure, has been purchased by dear experience in the British campaigns in warm climates. It is cheaper to give a native two prices to perform drudgery work in a hot climate, than have the same work done for nothing by the soldiers. Unless sickness be prevented no army will make any figure that will gratify its officers. Hence the commanding general will not find his time badly employed in studying the secret of not exposing his men to the causes of disease. Too *little* exercise as well as too *much*, should be avoided. The time of day for parading is not unimportant. The dress should be less for show than comfort. The soldier is sometimes troublesome and refractory, yet when he sees his officer interested in his welfare and believes that he will not be exposed to unnecessary perils, or have unnecessary burdens imposed on him, he becomes enthusiastic and will face any danger, endure any fatigue, and is ready to make superhuman exertions, at the bidding of his officer. But to come to the main point of preventing disease. Enthusiasm in military matters, like enthusiasm in religion, can only be kept up to a certain degree of intensity for comparatively a short time—when, like the passions, it requires repose—when too intense, and kept up for too long a time, it is not easy to wake when it falls into repose. Enthusiasm is a thing which has its fits and starts. It is a powerful weapon in the hands of a commander who studies how to use it—one who does not ride it to death when there is no occasion to use it, but keeps it in reserve for high occasions, and then knows how to command it to come forth at his bidding and give him aid. When a soldier has plenty to eat and drink, he does not require to be fed on glory, if nothing is to be done—no enemy about—no fortress to storm, his enthusiasm should be suffered to repose. If permitted to take rest, until the occasion comes when it may be needed, there are a thousand ways of making it up. When gaunt famine stalked through Jackson's camp and pestilence



threatened to cut off all his men, that great commander found a substitute for meat and bread in awakening a spirit of enthusiasm among his men, which also banished pestilence from his camp, by giving the body power to resist disease. He awoke the spirit of enthusiasm in one remarkable instance in a very simple way—by merely offering to divide a few acorns with an exhausted soldier. This simple incident soon spread through the camp, and the spirit of chivalry began to swell every bosom; making his troops forget that they were without food or the prospect of food in a distant wilderness; and nerved them to renewed exertion. The men, who a short time before, were ready to sink to the earth exhausted, and to fall a prey to a pestilential fever, forgot they were hungry on finding themselves heroes. Napoleon always fed his men on glory when meat was scarce, or some great fatigue was to be endured, or whenever he wanted to drive disease out of his camp. High enthusiasm, and epidemic diseases are incompatible. The secret of great military commanders in preventing disease seems mainly to consist in awakening a spirit of enthusiasm on perilous occasions. Some degree of enthusiasm is at all times a healthful stimulant against morbid influences and which it is always well to encourage, but the higher or more intense exaltation of mental excitement not being durable, should only be called up on great occasions. If it would always come on being bid, it would be an easy matter to banish a pestilence from an army by that agency alone, but as it is a fire which cannot always be kindled at will, none of the natural causes, giving rise to disease, should be permitted to haunt the camp when they can be driven out. The British owe many of their large possessions in warm climates to Moseley's discovery of treating camp dysentery successfully. Before a successful plan of treating the disease and banishing it from camp was discovered, Great Britain was in a fair way of losing her southern possessions by having no men to defend them; the dysentery killing them as fast as they could be sent out. The same mode of treatment did not succeed in the cold latitudes of Europe. The wars of the British, French, and Spaniards, during the latter part of the last century, in the West Indies, brought it forth. Our northern medical schools and northern writers, having no occasion for it, have neglected to teach it. It is a treatment adapted to the dysentery of camps in hot climates. For more than twenty years I have found it successful in plantation practice in the south. In communicating it I am giving nothing new, and I claim no credit but that of calling attention to a very successful practice that is almost forgotten.

*The one dose cure for Camp Dysentery.*—From twenty to forty grains of Ipecacuanha, and fifty drops of Laudanum mixed together in little sugar and water, molasses, or toddy, and taken at one dose—immediately the dose is taken, the soldier should lie down and be covered over with his blanket, to keep the air off. He should continue thus covered up with his blanket for 24 hours, drinking hot mint tea, or hot sage tea, or any other agreeable aromatic tea, as

balm, sassafras, or orange-leaf tea. The drink should be taken as hot as table tea is commonly used. The object is to promote perspiration and to turn the fluxion of blood from the bowels and liver to the skin. No drinks should be taken, for an hour or two, unless the patient vomits. After each spell of vomiting he should drink the *hot* tea. The medicine has the best effect when it neither vomits nor purges. It commonly vomits once or twice, and the next day purges once or twice. It cures the disease in half an hour, if given early in the complaint. That is, it stops the bloody stools on the spot, relieve the pain and tormina of the bowels, determines the blood from within, to without—causes perspiration and carries off fever. And if the perspiration be kept gently up for a sufficient length of time, the disease will never return. It is important after taking this medicine, that the patient be kept for some days out of a draft of air, and the first day or two be covered over with a blanket; though not to be kept too hot, or in too close an atmosphere. When the pain in the bowels is severe, the quantity of laudanum should be a little more, say a tea-spoonful. A full dose to allay spasm and pain is better than a small dose. The Sydenham laudanum is better than the common laudanum; if that is used, 30 drops will be sufficient, as it is stronger than the common laudanum. If the ipecac is very good and fresh, and has never been exposed to the air or light, 20 or 30 grains will be sufficient, and may be made into pills with the laudanum and taken all at once. If the patient lies on his back, and holds a table-spoonful of water in his throat, and will open his mouth, seven large pills can be swallowed at one swallow, if they be pitched in Indian file, down to the root of the tongue, the patient at that instant swallowing them with the water previously held in his throat. But the patient must lie flat on his back to swallow so many pills at one swallow. The dose taken in the pill form, is less apt to vomit. Should sweat not occur in an hour, the complaint may require the loss of a little blood from the arm, or another half dose in the pill form; but in nine cases out of ten, nothing more is required than the hot aromatic tea, above mentioned. It is essential for the success of the *one dose cure*, that it be commenced at an early period of the disease. Different physicians, seeing dysentery under different circumstances, are too apt to conclude that all other plans of treatment are wrong but their own.

Thus, in private practice, in mountainous districts, bleeding is generally necessary. In marshy districts, bloodletting is not well borne. When connected with much bile, the purging or calomel plan succeeds after so long a time. In some epidemics the patient is so suddenly reduced by the first onset of the disease, as to fall into cold sweats, faintings, laborious breathing, etc., requiring instantly the strongest aromatic stimulants to keep him from falling at once into a state of collapse and death. But generally speaking, the one dose cure, for the dysentery in camps, is the best, safest, and quickest. If it fails to cure in an hour, no harm is done: the purging, or

any other plan may be adopted. The misfortune of the purging plan is, the soldier who is cured by it, is seldom worth any thing in the campaign. Half the fluids in his body have to be evacuated by purging, before the plethora of blood in the viscera, causing the dysentery, can be removed. Whereas, by the one dose cure, the fluids are saved—instead of being purged out, they are thrown from the viscera to the surface, kept in the circulation and saved. All, or nearly all the camp dysenteries, have a single cause, a retreat of the blood from the surface, *without*, to the viscera, *within*. In private practice, the stomach or liver or some other organ may be at fault and constitute the first links in the morbid action; but among soldiers, it is almost always the skin. The scorbutic dysentery is an exception, where acids, lemon juice, and sour vegetables become the best remedies; and in dysenteries connected with remittent and intermittent fevers, the quinine is an important adjunct. After the patient has taken the one dose cure, the next day, if any remnant of the disease still remains, from a tea-spoonful to a table-spoonful of the following mixture, should be taken without being mixed with any thing whatever. To be taken on an empty stomach, viz: white vitriol 90 grains, common alum 60 grains, cochineal (the coccinella of Mexico) 3 grains, boiling water half a pint. When the solution is cold, strain through paper. From a tea-spoonful to a table-spoonful of this mixture every morning, fasting, or three or four times a day, will of itself cure mild cases and is one of the best remedies for the chronic form of the complaint. It can be made to operate on the bowels by lessening the quantity of alum in the solution, or to bind the bowels when the discharges are too frequent, by increasing the quantity of alum in the solution. In table-spoonful doses it nauseates and has all the advantages of nauseating medicines—and in smaller doses than a table spoonful, it is tonic and astringent and aperient at the same time, partaking of the character of small doses of rhubarb.

The author of the above practice is Benjamin Mosely, who published it in the West Indies in 1789. The practice was so successful, that his treatise on the dysentery went through many English editions, and was re-published in Latin. After a long experience in Southern diseases I am confident that it is more successful in the great majority of dysenteries than any other method of treatment before or since adopted. Dr. Mosely gave the ipecac first and the laudanum afterwards. According to my experience it is best to give them together, making one dose of it. I have tried the medicine in broken or divided doses, but find it not to succeed as well as the full dose. The aromatic teas to keep up the determination to the skin are important. To follow up the medicine by strong purgatives would defeat the object in view, of determining to the surface. Aromatic waters, or the odour from burning aromatic substances, are better than vinegar or the chloride of lime to correct the atmosphere about dysenteric patients.



---

*On the Influence of Malaria and Malarial Diseases.*—By A. G. LAWTON, M. D., of Marshall, Saline County, Mississippi. Communicated in a letter to the Editor.—(N. Y. Jour. of Medicine.)

When we survey the past history of this country, from its first discovery up to the present time, we find that this invisible and mysterious agent called *Malaria*, has been more widely disseminated, more pervading in its influence, and more efficient in the causatives of diseases and death, than all other causes combined.

It was the remark of the celebrated Volney, when travelling in this country, that every valley in America produced malarial fevers; and, although this observation is far from holding true at the present day, yet there has been a time when it would be strictly just, when understood in the broad sense, which it was originally designed to convey. According to Macculloch, one half, at least, of human mortality is owing to this cause. He says:—"At Walcheren, we lost 10,000 men, and the Antwerp fleet to boot. And when the French army attempted Naples in 1528, out of an army of 28,000 men, 24,000 died in a few days by choosing an injudicious encampment at Baix."

All past history goes to show the deadly influence of this invisible poison; and how it has occasioned the loss of armies—the failure of expeditions—the frustrations of plans and national movements—the depopulation of countries, towns and cities—cities that were once populous and powerful, where now the atmosphere is so pestilential, that it is dangerous even to visit the spot where they stood.

In 1610, the colony of Virginia consisted of nearly 500 persons, but in consequence of want of food and malaria, at the end of six months, only sixty of the whole number remained.

The early settlers of new countries suffer more from malaria than those of older countries. When the Spaniards settled Cuba, and the other W. India islands, great multitudes fell victims to miasmal fevers. Paludal exhalations are often prevalent, and the cause of fevers where they are not suspected. For example, during December and January last, I attended six cases of fever, of a malignant and typhoid character, in one family who lived on a high, dry, and hitherto healthy spot in Saline county, Mississippi. I regarded the fever as one produced by a specific cause; and, after searching in vain in and around the house, I suspected it might be under the house, the floor being of loose boards, between which were wide cracks, as is common in this country. I raised a board, and sure enough there it was. The house, which was of logs, was built on the grass, the floor being about 12 inches from the ground, and this space was filled with old bones, grass, crumbs of bread, dirt and sweepings, that had been accumulating for eight or ten years, forming a mass altogether about one foot deep. And this had been kept constantly wet by wash-water, and heated by fire in the room, on which floor a large family slept and ate. And this mass under the floor, in contact with the decaying house-logs, on the ground, formed a perfect hot bed, just

fit for the extrication of poisonous effluviæ, which are more effectual in cold weather, because the house is more constantly shut and a hot fire in the room.

Often have I seen whole families die off in a few days, and the population of neighborhoods generally thinned, when a timely knowledge of the true cause might have saved them all. In Holmes county, Mississippi, on the banks of a small stream, on one farm, in 1836, forty negroes and a whole white family, except the father, died in three months, leaving but one living soul on the place. And I am acquainted with many instances of a similar kind in Michigan, Illinois, Missouri (in this county), in Louisiana, Texas, and many other places.

According to authors, the circumstances calculated to generate miasmatic exhalations or malaria, are the ploughing of lands for the first time. They are also developed by the action of water on wood in casks at sea, bilge water in holds of ships, marshes, stagnant pools, moist meadow lands, etc. A mixture of salt and fresh water in pools or marshes, the drying up of lands that have been inundated, also give origin to this poisonous agent. Ploughing the western prairies, for the first time, is generally followed by more or less sickness.

The following are the results of my observations made in a small part of Saline county Mississippi: Of *one hundred and five* families, who have settled here from 1836 to 1843, *fifty five* ploughed fields on the *south* and *east* of their houses; these had fevers, bilious remitting, or intermitting, or some other disease. During the first, second, and third years, indeed, scarcely one of them escaped some kind of sickness. *Sixteen* of them ploughed fields on the *west* of the houses; of these, many had intermitting, some few bilious remitting fevers, but of a tractable character, and generally on the second or third years. *Eighteen* ploughed fields on the north, and but a few of these had intermitting fevers, and these during the second or third years. *Sixteen* did not plough around their houses at all, and none had any of these kinds of sickness, more than might be expected in any healthy country.

It takes the sod two and three years to rot, and it generates malaria every year, until it is well rotted. Log houses built on the ground, as soon as the logs begin to decay, especially if they have no cellars under them, produce an immense amount of the poison in question. And where they have loose floors, as the poorer classes generally do in these countries, two-thirds of every thing that falls on the floor is swept through. This accumulates by slow degrees, and is wet three or four times a week, by wash-water on the floor, until it forms a perfect hot bed, just fit for the generation of poisonous exhalations.

And these houses have no windows, nor means of ventilation but the door, which is constantly kept open for light to come in, except in the coldest weather of winter. Then is the time for this putrefying mass under the floor, and the rotting house-logs, always moist and hot by fire in the room, to generate fevers of the most malignant character and grade. The malignancy and awful fatality of these

fevers are well known to practitioners of these countries. I see no reason why these very causes would not produce a genuine typhus.

Macculloch says, that a remittent will become, or perhaps produce, in any given individual, a contagious *typhus* under confinement.

But I think the most, if not all these cases, may be traced to a combination of the two poisons, animal and vegetable exhalation, and these cases generally occur in, or immediately after, very cold weather.

There is a stream running through our county, called the Salt Fork, the head of which is a salt spring, large enough to turn a mill a half-mile below its source, in which I am told a lead has been dropped 300 feet without finding bottom. This stream has many other salt springs running into it in its course. It is a mixture of mineral salt and fresh water, and a beautiful clear and running stream. As far back as I can trace, the people living on the banks of this stream have suffered with fevers every year, and with many other diseases; sometimes the greater part of the population are sick. But for three years past it has been more than common sickly. In my practice on this stream last season (1845), out of a population of 63 persons, there were 56 cases of fever, mostly bilious remitting. Of these none died. Malarial diseases are often masked; it is difficult to discern their true type and character; the fever being low, and sometimes wanting. According to authors, malaria induces, or produces,—fever, neuralgia, dysentery, cholera, tic-douloureux, or headache, &c., &c.—*M. Cullock*. But I would not stop here, but would include congestion, inflammation of the uterus, assimilating cancer, and cured by *iodine*, hypertrophy of the liver and spleen, chronic diseases of the mesenteric glands, anasarca, &c.; also includes a tendency to venous congestion, imbecility both of body and mind: especially in those who live on improper or scanty food, in old, decaying houses, without windows or proper means of lighting and ventilating, abortion, flooding, ovarian dropsy, &c., &c.\*

\* While on a recent visit to a part of New England, remarkable for health, we became acquainted with an instance which illustrates very strongly the influence of malaria, when of not sufficient intensity to cause regular paroxysms of fever. A family of seven persons, old and young, lived in a house, in the cellar of which was a large quantity of decaying vegetables, partially covered with water, which stood upon the bottom of the cellar to the depth of nearly six inches. The family, though not confined to their beds, were, nevertheless, all so indisposed as to be almost wholly unable to attend to their ordinary duties. The most prominent symptoms, and which existed in every individual of the family, were nausea, want of appetite, furred tongue, bad taste in the mouth in the morning, muscular debility and prostration, universal malaise, headache, pain in the spinal cord, shooting pains in different parts of the body, depression of spirits, languid, sluggish circulation, torpor of the surface, and all the secretions, irregularity of bowels, etc. These symptoms existed for several weeks before the cause was discovered, and without resorting to any other measures than removing the cause, draining the cellar and cleaning it out, they all soon recovered their usual health. Such facts certainly ought to convince those who are still sceptical as to the existence of any such agent as malaria.—[*Ed. N. Y. Jour. of Medicine.*]



I was recently called to see a young man in the family J. G., on the 9th day of fever. When I arrived at the house there were three other persons down with the same fever, which was of a typhoid grade. On the next day when I arrived at the house, I was much surprised to find three more boys, still younger, down, which made in all seven cases. They all got well except the one I was first called to see, Oct. 22. He died on the thirteenth day; had black sordes on the teeth, bleeding from the nose and gums, and delirium.

On inquiry, I found the facts to be as follows:—A year or two ago they had built a brick house, under the wing of which was a cellar, in which water had stood for the last eighteen months, open on the south by a door and window. Some weeks ago these boys had dipped out this water and mixed brick with it in hot weather, and it had a very bad smell. The oldest, who died, was the most exposed; he moulded the brick, and stood on the wind side of the bed where the brick was drying.

It appears that these boys took the fever one after the other, as they were exposed, or according to the intensity of exposure to the exhalation in making and drying these brick. All that assisted in making and drying these brick, took the fever. The others were all well and hearty, and had no sickness that year worth mentioning.

This is one of the many instances of the kind I have witnessed. I will now offer a few remarks on *symptoms*, but they will generally be confined to the sickness on the two streams, the Salt Fork, and a tributary of Blackwater. Both are salt water in part.

These streams often overflow their banks, and spread over grassy bottom land. This generally happens in June or July, after which it is generally sickly.

After exposure to miasmal exhalations, for a longer or shorter time, it may be a week, three weeks or three months depending on other existing causes, or the constitution of the patient, the signs of disease appear. The first thing noticed will be, after a hard day's work, getting wet, going without dinner, or eating too much, exposure to hot sun, &c. On the next day, unexpectedly, and without any ostensible cause at the time, the person feels an unaccountable weakness in the back and legs, slight aching in the head, eyes and stomach, accompanied with a little coldness of the fingers; drowsy, dull, and listless; sometimes he experiences a slight trembling: after a few hours it goes off and he thinks no more about it, until it comes again, which will be on the next day, or odd day, at the same hour, which is generally in the fore part of the day; but it may occur at any stated hour. This may continue for a week or more, getting better and worse. After a while he finds himself unable to attend to business, and concludes to doctor; he takes a heavy dose of Cook's pills, or some other drastic purge, after which he gets a hard ague or chill, or finds out that he has an attack of fever, of which he may get well in a few days. This is the beginning of the mildest cases. They get well, but being constantly exposed to the original cause, they soon get down again.

At a certain time of day they will have great weakness, blindness, or throbbing in the head, palpitation of the heart, feet and hands swell every afternoon. They will take a pain in or over one eye, or over one side of the head (this they call sun pain); the eye inflaming, is red and painful, with the fever on that side of the head; after three or four hours it goes off, to be renewed on the next day or odd day. But sometimes the pain and fever are more severe, rising with the sun and going off as the sun goes down, and they sleep well as usual at night. And in the same way, occur sick-headache, neuralgia, toothache, and vomiting. I have seen vomiting occur at ten o'clock for a week, every day, often mixed with blood. But sometimes weakness is the only symptom, and this increases for weeks with a tolerable appetite all the time.

As the season advances, the attacks are more violent and sudden, the fever gets stronger as the cold weather approaches, when many of the cases become strong bilious fever, or they will take a chill that will prostrate them at once, and the fever rises high, or the fever may fail to come at all; if so, the exterior assumes a bloodless appearance. There is more or less congestion, sometimes complete if the congestion is partial; there may be vomiting, sometimes, of blood. In females, vomiting matter, tinged with blood and flooding at the same time, especially about, or at the turn of life. In girls the disease is ushered in, many times, by uterine irregularities or uterine flux. Vomiting blood is a common occurrence in many grades of those fevers. Congestion may take place in the first chill, but more commonly in the second; it is often brought on by overpurging, after which there is no fever, for that is the end of the race; they either die or get well,—that is, when congestion takes place suddenly and extensively.

Congestion may take place in the lungs, spleen, liver, bowels, and sometimes in the head, but not often. In congestion of the lungs, the veins of the extremity assume a dark color, and sometimes black; respiration short and oppressed, and a feeling of great weight across the chest; the pulse gets weaker as congestion becomes more established, until it is finally lost; the skin on the extremities assumes a leaden hue; cold perspiration oftentimes is extreme; cold feet and hands, and the patient complains of nothing but heat. There is congestion of the bowels, liver and spleen, and this is by far the worst complication; the pulse sinks, the extremities grow cold; as the cold advances the skin assumes a bluish cast, or leaden hue, and dimpled like goose-flesh; the tongue may be dry and clean, or a little furred, or it may be coated thick and dark, if the fever has run a number of days before congestion took place; the respiration is short and oppressed; there is great weight and heat across the stomach and bowels; cold perspiration, and sometimes delirium. In fatal cases the perspiration is excessive, the skin becomes relaxed and cold; the patient is restless and constantly changing from one position to another, often complaining. Ask him what pains him, he will say,

nothing, no pain, but so hot, and yet he is of an icy coldness everywhere but on the stomach and bowels, which are very hot. As death approaches he becomes more composed and tranquil, and dislikes going to sleep. Congestion may take place any time in the course of a fever, especially on the ninth day, but always on the day and hour according to the manner and type of the fever.

As to the treatment of malarial fevers all agree that QUININE is an antidote, or a specific, some give it in large doses, some in small, and both are mostly fortunate. I have given it in all ways, and I am fully convinced that one grain of quinine, combined with other substances, will effect more than five will by itself. Three years ago I adopted a plan of combining it in a manner that I never yet have had cause to change. The combination has two advantages. One is, it is more effectual, safer, and leaves the system in a better condition; the other is a great saving of the article. In intermittent and all mild malarial fevers, I give a purge if it is needed, generally a mild one, as blue mass, ten grains of calomel, with Dover's powders, or Lee's pills, according to the circumstances of the case. Then I give the following powders, changing them to meet the indications as near as possible. I never bleed in these cases in the warm season, and very seldom in the winter, for bleeding is very apt to induce congestion. The constituent principles of these powders may be increased or lessened according to the circumstances of particular cases.

|                            |                         |                           |
|----------------------------|-------------------------|---------------------------|
| ℞ Quinix Sulphate, gr. i., | or Quinix Sulphate,     | gr. ij.                   |
| Camphor Pulv., gr. i.,     | " Camphor Pulv.,        | gr.                       |
| Pulv. Doveri, gr. ij.,     | " Carbonate Ammonia, aa | gr. ij.                   |
| Fiat Pulvis.               | Fiat Pulvis.            |                           |
| ℞ Quinix, gr. ij.,         | or Quinix, gr. i.,      | or Quinix, gr. ij.        |
| Camphor, gr. ij.,          | " Camphor, gr. i.,      | " Camphor, gr. ij.        |
| Myrrh, gr. ij.,            | " Capsic. gr. ij.,      | " Morphine, gr. 1-8       |
| G. Opii, gr. 1-4,          | " Opii gr. 1-4          | " Ferri Carbonas, gr. ij. |
| Mx.                        | Mx.                     | Mx.                       |

In intermittent fever, I begin with these powders soon after the fever begins to go off, and give one every two hours until six or twelve are taken, according to the type of fever. Then if needed, I give one or two pills at night, made of aloes, soap, and rhubarb, and the next day give the powders as before; and I seldom have to leave medicine but once for these cases. In bilious remitting fever, I generally lessen these powders, beginning early in the morning, and give four, five, or six of these powders through the day, with directions to stop when the fever gets high, give a dose of calomel at night, and nothing more till morning, when I commence the powders again.

In those cases where the fever runs high, I give calomel, or blue mass, every other night, or every night until the biliary secretion is established, when other purgatives are stopped, and I continue the powders, and sometimes the above named pills at night. In the most of these cases there is much visceral irritation, and here blisters, and counter-irritants of mustard must be used. Sometimes there is ex-



cessive vomiting in these cases, when I find nothing better than what has been long in use, that is, a mustard plaster over the stomach, and sometimes around the ankles and wrists. With this treatment I have been so far very fortunate, and seldom lose a patient. In winter fevers I increase the Dover's powder, and lessen the other parts in these powders, and the effect has been perfectly satisfactory.

Pills containing camphor I keep corked up in vials, and make but few at a time. Thus kept I think the camphor is retained sufficiently for all practical purposes.

---

*Excision of the Inferior Maxillary bone for Osteo-Sarcoma.* By WILLIAM H. DEADERICK, M. D., of Athens, Tennessee.—(West. Journal Med. and Surg.)

The operation of which I propose to give a very brief account, was performed nearly thirty-seven years ago, and at that period, so far as I am informed, was unknown in surgery. Since that time it has been repeatedly executed, and the claim of having originated it has been set up by a foreign surgeon. By comparison of dates it will be seen that my operation preceded that of Dupuytren by two years.

On the 6th of February, 1810, Jesse Lay, a lad of about fourteen years of age, was brought to me on account of an excrescence which gradually arose from his gums, and which, in consequence of long neglect, completely enveloped the lower maxillary bone of the left side. It filled the inside of his mouth to such an extent as greatly to interfere with respiration and deglutition. Externally, the tumor exhibited the appearance of a wen of considerable size, and as it was daily augmenting it was evident that nothing short of its entire removal, with the portion of the bone it occupied, could save the life of the patient. Accordingly an incision was commenced just below the left ear, and continued along the course of the bone to the centre of the chin; a second one was made at right angles to the first. The integuments were then dissected from the tumor, and the bone sawed off at the angle of the jaw, and half an inch from the centre of the chin nearest the angle divided. The integuments were united in the usual manner, and the boy had a speedy and perfect recovery. The youth, at the time of the operation, although fourteen years of age, was not larger than boys usually at ten or eleven; but immediately afterwards he commenced growing, and attained the ordinary stature of manhood. A well trained whisker hides, in a great measure, the scar left by the incision, and at a short distance the effects of the operation would not be observed.

Athens, Nov. 1st, 1846.

*Note.* Dupuytren is the generally accredited author of the operation above described. This distinguished surgeon removed a portion of the lower jaw for a cancerous affection of the gums in 1812. The

operation of Dr. Deaderick, it will be seen, was performed two years prior to that time. Dupuytren's case was reported to the Faculty of Medicine at Paris, by Lisfranc, in 1813. The report of Lisfranc is republished in the *Dictionnaire des Sciences Médicales*, vol. xxix. p. 480. Dr. Deaderick did not give to the public any account of his operation before 1823, when he described it in the American Medical Recorder.

Dr. Mott, in a letter to Mr. Liston, has preferred a claim to priority in this operation. He says, "I claim for myself and my country *originality* in the operation of exsection of the lower jaw at the temporo-maxillary articulation, and in different proportions for osteo-sarcoma. I avow and declare solemnly that before my first exsection of the lower jaw for osteo-sarcoma, I never saw, read or heard of anything of the kind ever having been done in any country." He adds, "We repeat and aver, that the exsection of the lower jaw of even a fourth part, much less a half or two-thirds of it, for any form of sarcoma involving the whole texture of the bone, has never in our opinion been performed by any surgeon, past or present, until by myself at the time above stated."

The operation of Dupuytren is admitted not to have been for osteo-sarcoma, but for a cancerous sore situated over the angle of the jaw. Ribes, in the *Dict. des Sci. Méd.*, referring to this operation, has the following words: "These facts lead to the hope that fungus, or osteo-sarcoma of the lower jaw, a disease so formidable that it has in many cases been vainly attacked with the iron and fire, will henceforward, since the operation of M. Dupuytren, be removed by amputation of a portion more or less considerable of the lower jaw, without the danger of any accident, and, if the disease be local, with a certainty of success."

Many years before these predictions were uttered in Paris, the operation had been successfully performed by a young surgeon in the backwoods of Tennessee.

In a lecture delivered by Dr. Houston, of Dublin, in 1844, and published the same year in the London Lancet, the honor of having originated this operation is claimed for Mr. Cusack, who has performed it twelve times. The lecturer says, "The grand exploit of amputating the lower jaw, even from its articulations, the boldness of which has been only equalled by its success, has now become a standard operation in surgery. Persons afflicted with the distressing and loathsome disease for which this operation is undertaken, were formerly allowed to die, without any idea being entertained of the possibility of saving them; but now that a great mind, relying on a sound knowledge of the capabilities of the human frame, has set the example of extirpating the diseased mass *in toto*, many surgeons have fearlessly followed in the path thus laid open for them, and have derived honor from the success which crowned the enterprise. The success of this operation, both as regards immunity from danger, rapidity of convalescence, and the useful quality of masticatory apparatus which follows, is almost incredible."

Upon this passage Dr. Townsend, in his edition of Velpeau's Surgery, comments thus: "To whomsoever, therefore, the honor of this great triumph belongs, *mutatis mutandis*, the eulogium ought to apply equally well in Dr. Huston's conceptions, who, doubtless, would not desire to diminish one iota of it, because a name of different orthography from that of the justly respected Mr. Cusack, should happen to be found by a species of anaplastic substitution, to dovetail more completely than his with the historic facts in the case. We say cheerfully with all our heart, *palmas qui meruit ferat!*"

Dr. Deaderick's is the name which seems "to dovetail" most "completely with the historic facts," and to him, therefore, must the palm be awarded. True, he operated but once, and his operation was not made known to the world for many years afterwards; but it was undertaken for what appears to have been osteo-sarcoma; it involved the excision of nearly one-half of the lower jaw bone, and was crowned with perfect success. Dr. Deaderick did not call the disease *osteo-sarcoma*, but, in his account of his operation published in the Medical Recorder, described it as "a cartilaginous tumor." In the brief notice of it given above he applied no name to the affection, and the title prefixed to his communication is ours. Every medical reader knows how vague is the term "*osteo-sarcoma*," and what a diversity of morbid growths are called by that name. From the description of the tumor in Dr. Deaderick's case we have no doubt it would be styled osteo-sarcomatous.

It appears, then, that Dr. Deaderick preceded Dupuytren in the operation of excising the lower jaw bone two years, and that he anticipated Dr. Mott by eleven years, although he neglected to publish an account of the operation until after Dr. M. had communicated the results of his to the world; consequently Dr. M. was unapprised of what had been done by his countryman. He may still claim "for his country," if he cannot for himself, "originality in the operation," for Cusack's operations were performed two or three years subsequently to Dr. Mott's first. The operation has been performed by Dr. M. seventeen times. In a note appended to his letter to Mr. Liston Dr. Deaderick's operation is referred to, and this brief, obscure notice, is all the allusion to it that we have found in looking through the American edition of Velpeau's great work on surgery. We have deemed it but an act of justice to a modest and worthy member of the profession to give these dates in connection with the history of his case.

Y.

---

*On the use of Quinine in Florida.* By R. S. HOLMES, M. D., Med. Staff, U. S. A.—(Am. Jour. Med. Sci.)

We extract from Dr. Holmes' article his appreciation of "northern precepts" in the practice of southern diseases.

From experience in Florida one is almost disposed to believe, that



there is a certain rule which though apparently too mechanical in its operations, to some extent is applicable; it is this,—in proportion to the amount of miasmata in the system as shown by its effects, so must the dose of quinine, for the cure, be increased or diminished.

The largest amount of quinine I have ever given at a single dose has been eighty grains; this is the extreme dose: the average quantity is about twenty grains.

Let us commence with intermittent fever. The first question I always ask a patient who complains of this disease concerns the state of his bowels. I am careful never to give quinine with the intestines in a torpid or gorged condition, for its effects then seem to be comparatively lost. I have given it, however, when the bowels were actively purged and irritated. It seems not to be governed by the general rule that medicines will not affect the system properly when the bowels have not been well attended to. Having then in a common intermittent fever freely opened the bowels, if they have not been already purged, by means of oil, magnesia, calomel, or rhubarb, I give the quinine generally on the evening of the day on which the purgative has been taken, fifteen grains, say, as a general dose, *at once* (not in divided doses), in water with a few drops of vinegar or of some acid, so that it may be readily dissolved. Suppose this to be given in the afternoon at 3 P. M., the patient having had an attack of intermittent on the same day, commencing a 9 o'clock, A. M., and ceasing at 2 P. M. The fever, being a quotidian, will come on, the succeeding day at the same time, despite the quinine; both the chill and fever will be of a lighter grade, but will be as distinctly marked, and will remain as long; but on the third day the patient will be entirely free from the disease, and will not experience, during any part of the day, the slightest symptom of it. In treating many hundred cases of fever in Florida I do not think I have met with twenty exceptions to this rule in cases of pure intermittent fever.

On my arrival in Florida, knowing nothing of southern diseases from practice, and being stationed alone at a distant and unhealthy post, I learned the rules by experience alone, guided by which I have since successfully administered quinine. I practised on northern precepts, annoying the patient without arresting the disease, by a continued succession of two grain pills; occasionally at long intervals checking the disease, by these means, but much more frequently vexed for weeks by the continued sickness of the soldier. I rose finally to ten grains, and continued to give this quantity at once; I more frequently succeeded by this practice, but not yet to my satisfaction. If the patient had a quotidian, I gave the quinine on the day of the chill; if a tertian, also on the same day; if successful with the ten grains, I was surprised to find the quotidian manifested itself in a modified degree on the succeeding day, and on the next was entirely absent; whilst of the tertian on the third day, not a symptom appeared; hence I drew the rule which I have often verified since, and from which I have never varied, or had any reason to

doubt, that the full effects of quinine are not manifested until about eighteen hours after its administration. Finally, convinced that large doses of quinine are necessary in the south, I increased my minimum dose for intermittent fever to fifteen grains given at once.

Congestive fever is of course a disease of much greater danger than the one we have been contemplating, and appears to be the disease proper in which the powerful and successful effects of this agent have been most apparent. This disease is remittent in its character; the grade of its violence, to the most casual observer, will appear much greater than any stage of intermittent fever; there is complete prostration; the faculties are benumbed, the countenance anxious and haggard, and the mind desponding; all these symptoms are often present an hour after the first attack, and when you see the patient for the first time. Here it is evident two plans of treatment must be pursued simultaneously:—to rally the patient for the time being, and to provide for a periodical return. Frictions, mustard poultices, and stimulants, will answer the first design; but I know of no other agent than quinine, in the materia medica, that will do for the second; you cannot wait for its operation, if the prostration of the patient is so complete, that you dread the return of the chill, lest it prove fatal; and in the first few minutes after seeing the patient, I have given him from thirty to sixty grains of quinine in one dose, in water or brandy; the brandy for the present contingency, but the quinine for several hours ahead.

---

*Treatment of Pneumonia.* By ANTHONY TODD THOMSON, M. D.  
(London Lancet, Nov. 1846, from Western Lancet.)

The chief object of Dr. Thomson is to examine the comparative merits of *blood-letting* on the one hand, and *tartar emetic* on the other, as remedies for pneumonitis. His observations are based on the results of 62 cases, 38 of which occurred at University College Hospital. The author resorts to blood-letting in the beginning of the disease; but he condemns its repeated and profuse employment in other stages, and is more inclined to rely on tartar emetic. This latter remedy, he is of opinion, produces its beneficial influence by virtue of *counter-irritation*; and this counter-irritation, which is nothing more than sub-acute *inflammation*, prevents the *absorption* of the remedy, and it may then be largely used without producing nausea; in other words, "tolerance" of the tartar emetic is merely its non absorption. The following extract will convey an accurate view of the author's practice:—

My practice, as soon as I have fully satisfied myself of the existence of the disease, and if the attack has not run on to the second stage, is to order one bleeding to the amount of sixteen or twenty ounces; to follow this, immediately, with three or four grains of calo-

mel and one grain of opium, with the view of preventing that nervous irritability which often succeeds the use of the lancet, and of sustaining the beneficial impression made on the system by the blood-letting. In two hours afterwards, I gave one grain of potassio-tartrate of antimony in a fluid ounce and a half of emulsion of bitter almonds, and repeat this dose every third or fourth hour, until a decided diminution of inflammatory action takes place—that is, until the crepitation has nearly disappeared, and the sputa are no longer rusty and tenacious. The intervals between the doses of the tartar emetic are then extended to six hours, and afterwards to eight hours, and so continued until convalescence is confirmed. I prefer the bitter almond emulsion, on account of its containing hydrocyanic acid, which has a sedative quality, and a more decided influence in quieting the nervous system, and abating the cough, than small doses of opium. When the pneumonia is uncomplicated, this plan, with the occasional aid of some mild aperient, has, in my hands, seldom failed to carry the case to a successful termination. When the attack has passed beyond the first stage, when dullness on percussion indicates hepatization, then the object of the second indication—namely, to excite the capillaries and prevent farther depositions—requires attention; and, in order to fulfil this indication, I order four or five grains of mercury with chalk, or one grain of calomel, to be given in each interval of the administration of the tartar emetic.

---

*Two Cases of Double Vagina.* By Professor MEIGS.—(Medical Examiner.)

On the — October, 1846, I was called to Mrs. —, aged 20 years, in labor of her first child. She is a remarkably well formed and comely woman.

The pains were sharp and frequent, evidently of the kind called dolores præparantes, or grinding pains. After some time, as they had become more violent, I examined the state of the os uteri, which was of the size of a half-dollar, the head of the child presenting, and the ovum unruptured. In the course of an hour more, I examined again, and the os uteri was then nearly dilated. While pressing the pulp of my index finger to the left side of the pelvis, it caught in a seeming bridle, which at the instant made me fear the cervix uteri had been broken, so as to detach a semi-circular portion of the os uteri, for the pains had been exceeding sharp, and their returns had been announced by violent cries. It was but a moment that I indulged the idea of a rupture of the cervix, for upon pushing the index farther, and flexing the finger, I found I could draw the point of it outwards, pulling along with it the bridle in question. Still I did not understand the case until, having withdrawn the indicator, I examined with it the structure of the external parts, and then learned that the



lady was possessed of a double vagina. Supposing that such a revelation would not be agreeable to her, I kept my own counsel, hoping that the child's head would come down through the right or the left channel without injuring the septum. But after the head escaped from the circle of the os uteri, the bridge or partition would not go definitely to the right or to the left, although I thrust it first one way and then the other. The tie was so strong that the fleshy septum extending from the anterior to the posterior column of the vagina would not admit of the dilatation of the lower or outer third of the tube. And as the lady was very strong, and had powerful uterine pains, I began to perceive some danger of the vagina being ruptured by the vain efforts for expulsion.

I now explained to the monthly nurse, and to a relative of my patient, the cause of the delay, and the necessity that had arisen. I therefore procured the requisite permission to expose the parts to an inspection. Upon this, the two orifices of the vagina were seen to be exactly alike, and the partition stretched across the head from front to rear of the passage, which by it was wholly prevented from dilating.

I now, with a strong scissors divided the wall by a single stroke of the instrument, whereupon the child's head advanced, dilated the os magnum, and was speedily delivered with safety to both the mother and her infant. She never complained afterwards relative to the operation, and within a month I met her on foot in the streets.

A week later I was called to a lady in her 30th year, in labor of her first child. Upon examining the state of the os uteri, I found the circle not much bigger than a quarter of a dollar, with thin margin, and within it the penis of the child; the scrotum being detected within the os uteri after the pain ceased. As it was night, I went to another apartment and slept an hour, when being called, I found the os uteri very much dilated, and a buttock, near which was the right foot, presenting.

While inquiring into the state of the cervix, I hooked my finger into a bridge, just as I had done in the case above mentioned, and I confess that the same thought was obvious to me, viz: that she had broken off a half ring of the circle of the os uteri, but I immediately afterwards discovered that I had another case of double vagina under management. In this case the partition was very firm and thick, extending from the os magnum almost up to the os tincæ. I inspected the external structures, and the two vaginas were each perfect and alike, included within labia pudendi common to both.

I was glad to find that only one foot of the child would come down, being fearful that if both should descend, I might not readily prevent one from entering the right and the other the left vagina.

I now disengaged the right foot and brought it down the right channel, the left leg was flexed upon the belly and thorax of the fœtus. With a little assistance the foot was delivered and the buttock of the child coming downwards, thrust the vaginal wall to the

left, and so the trunk was delivered. I had great difficulty to extricate the head of the child, which remained long in the vagina; the infant breathing from time to time the air that I admitted through the hollow of my hand and fingers to its mouth and nostrils. The child, a male, was alive and in good health; the mother is quite well recovered.

Some years ago I was called by the late venerable Dr. Ruan to consultation upon a case of double vagina in a primiparous woman. I delivered the child, with the forceps, through the right canal, without difficulty or any injury, and had some five weeks later an inspection of the parts, which, as I remember, were very similar to those described in my second case above.

---

*Prodigious Fæcal Accumulation in the Rectum.*

To the Editor of the Boston Medical and Surgical Journal:

DEAR SIR,—On the 17th July, 1845, I was called to see F. C., a young lady aged about 15 years. Was informed that she had several times menstruated imperfectly, that she was somewhat troubled with costiveness, and that she had had no evacuation from the bowels during the three days last past. Tongue coated, white, not dry, skin hot and dry, pulse somewhat too frequent, and complained of pain in her head, with perfect loss of appetite. *Prescription.*—Directed her to take six grains of the following pill mass every six hours. R. Soc. aloes, 3iij.; g. scammony, 3ss.; pulv. jalap, 3iij.; hyd. proto-chlo., 3i.; sapo. cast., gr. xv.; nit. pot., 3ss.; tart. ant., 3j.; ol. anise, arab. muc., aa q. s. to make a mass.

July 18.—Being about ten miles distant, I received a very urgent call to visit her; found her in pain, like the last pains of labor, the intermission being very short, yet very perfect; urgent and painful desire to pass urine, yet none had passed since the morning before (now 4 o'clock, P. M.) Cathartic pills have not operated, and was now informed that all the evacuations during the past two weeks had been but an occasional scanty discharge of mucus, and that such discharges were now being produced, the consequence of the excessive tenesmus. Deciding to introduce a catheter I attempted to pass a finger into the vagina, but was prevented by what appeared to be an unyielding mass, filling the whole pelvis, and pressing upward and forward so as to make it very difficult to pass the finger between it and the pubes. I accordingly carefully insinuated the point of a silver catheter, into the urethra and passed it into the bladder, and discharged a quart or more of urine. The tenesmus still continued, and the acuteness of the pain was somewhat relieved, but the involuntary straining effort which characterizes the closing throes of labor still continued. With considerable difficulty I now passed a large sized gum-elastic catheter into the rectum, and through a mass of

fæcal matter, some ten inches, when adapting a syringe to the external end of the tube, I succeeded by dint of perseverance in forcing warm water through the plugged orifice of the upper end. After sending up about a quart of fluid, the catheter was withdrawn, and in two or three minutes more than a gallon of fæcal matter followed, consisting almost entirely of the seeds of raspberries. After another small evacuation, which followed in a few minutes, she became entirely comfortable. The next day I was again called, and finding much the same symptoms, resorted to the same means, and obtained a similar result. After this the urinary bladder and the rectum evacuated themselves without aid, and raspberry seeds continued to appear in the fæces for several days longer, though none had been eaten during the week previous to my first calling upon her. Since that time she has enjoyed her usual health.

I present this case to the notice of the profession, not on account of any peculiarity of the practice; indeed I think it was but what was indicated, and would have readily suggested itself to any reflecting physician; but 1, To show that a vast amount of fæcal matter may accumulate in the rectum, and also above the sigmoid flexure of the colon, while the sensibility of the mucous membrane remains low as in cases of constipation, but that when this sensibility is increased, as it was in this case by the cathartic, violent symptoms are the consequence; and 2, That when the pelvis becomes sufficiently full to distend the perineum, the action of those muscles associated in the function of expelling the contents of the pelvic viscera is excited, and if this distension be proportionally increased their action becomes intermittent and involuntary. This phenomena we have all so frequently witnessed in parturition, when the head of the child fully occupies the pelvis and rests on the perineum, that we find it difficult to view it as but a specific accompaniment of that series of phenomena, the aggregate of which constitutes labor. Indeed so strong did this influence operate upon my mind, in this case, that when preparing to introduce the catheter, notwithstanding the youth of my patient, and the character of the family being above suspicion, I could not divest myself of the feeling that, upon the finger entering the vagina, the head of a fœtus would present itself. S. A. Cook.

*Buskirk's Bridge, N. Y., Jan. 4th, 1847.*

---

#### *Iron in Cachexia.*—(Medico-Chir. Review.)

Iron is an agent almost exclusively employed in the treatment of cachexia, and its use has been in part recommended on the ground of the deficiency of its normal proportion in the blood. It is believed that the administration of ferruginous preparations may restore the normal quantity of the metal to this fluid, and on this ground the most soluble preparations are recommended, and, according to M. Mialhe,



those chiefly should be chosen which are susceptible of decomposition by the alkalis of the blood.

M. Beau doubts the correctness of this view of the direct agency of iron, although the benefit of the substance is incontestible. The iron of the blood is contained only in its globules, and there will be more or less of it as these globules prevail. To cure hydræmia, therefore, and augment the proportion of globules, it can never suffice to introduce one element of the globule only. The diminished proportion of globules is maintained by the defective condition of the digestive functions, and iron acts only by restoring these to their integrity. In fact we daily witness cases of chlorosis treated by iron in its most soluble forms without any success whatever—the digestive organs in such cases being in a condition not admitting of their benefitting by its agency. The iron is abundantly absorbed into the blood, and yet the globule is not constituted. On the other hand, when the metal acts beneficially, the earliest effect it produces is upon the digestive organs. We see other patients again recover under the use of aloes, change of air, or the removal of moral causes, &c., without even taking iron at all, or after abandoning it as useless—the dyspepsia having yielded to other means after the iron had failed in relieving it. Our primary indication then must be to attack *the cause which produces the dyspepsia*. M. Trousseau has already protested against this indiscriminate treatment of the cachexiæ by iron; and, in fact, we can only re-constitute the blood by re-establishing the digestive functions, and removing causes which operate injuriously upon them. It is not by the direct agency of this medicine, but by the greater amount of aliment it enables the digestive organs to master, that iron is useful; and cachexia induced by mere hæmorrhage may be at once removed by the rapid administration of aliment alone.

---

*Case of bad Compound Fracture.* By OTIS HOYT, M. D. (Communicated for the Boston Medical and Surgical Journal.)

Since reading the excellent address of W. J. Walker, M. D., on compound fractures, whose opinions on this subject are peculiarly entitled to a favorable reception by the profession, I have thought a case which occurred in my practice, while at Framingham, might not be altogether uninteresting to the readers of the Journal, in corroboration of his views relative to saving limbs which are badly fractured. I have no doubt many limbs, which might have been saved, have been sacrificed to the shrine of ambition by the young surgeon, who may wish the fame of being a good operator. I have noticed in the vicinity of some surgeons who have the reputation of being good operators, there are more people who have lost a leg or an arm than in other regions. I will not say that these limbs have been unnecessarily sacrificed; but it proves one of three things, viz., that accidents

occur more frequently in these regions, requiring operations of the kind; or that the patients of other surgeons have not recovered; or that limbs have been unnecessarily amputated.

In the month of February, 1843, I was called to see a son of Nathaniel S. Falkner, of Framingham, aged 6 years. A few minutes before I saw him, he was in the street, when a team was passing with a heavy wagon loaded with a cord and a half of green chestnut wood, and, as roguish boys are apt to do, he stepped up behind one of the oxen and struck him. The ox, resenting the blow, kicked the boy immediately before the wheels, both of which passed obliquely across the thighs. The road was composed of hard gravel, and a narrow rut worn down from three to four inches deep. The place of injury of the left thigh was near the middle, and that of the right below the middle, including about one third of the whole length of the thigh. In viewing the limbs sidewise, they appeared about as thick and as flat as the open hand. No pulse could be felt in any part below the place of injury in the right limb. It was cold and livid. In examining the place of injury, I found the bone crushed in pieces, the integuments torn through, and the lower fragments had been driven through the pantaloons into the gravel. Some of the marrow of the bone was found on the pantaloons. The left limb was not so severely injured. Pulsation could be detected in the foot, and the os femoris was broken in two places, corresponding in distance to the width of the wheels. I had no fears but this limb would do well enough, provided there was no other injury. But what was to be done with the other limb. The boy was cold and pulse feeble, evidently in such a state that the shock of the operation of amputation would not be borne well. I therefore decided to place the left limb in as good a position as possible, and accordingly dressed it with the many-tailed bandage, and suitable splints, and laid it over a double-inclined plane. I then removed all of the pieces of bone appearing to be loose in the right thigh, and all of the sharp points likely to prick the soft parts, and laid it in nearly a straight position, and enveloped it in cotton to keep it warm, leaving the opening through the integuments in such a position as to allow the draining of the wound, determining that if, when the boy revived from the first shock of the accident, circulation and sensation did not return, to amputate. In about six hours the limb became warmer, feeble pulsation could be felt in the ankle, and sensation had partially returned; the leg was less livid.

As the circulation at this time seemed to indicate that the large vessels and nerves were not so injured as to prevent their proper functions being performed, and relying very much on the previous healthy condition of the boy, and the intelligence of his parents to take suitable care of him, I determined to make an effort to save this limb. There was sufficient discharge of blood from the wound for forty-eight hours to prevent much fever or much inflammation of the part injured. He was gently purged every day during the first week with sulph. mag., and his diet for the first four days, one half

pint of water, and one half of a common cracker per day; and during the next four days, he was allowed the whole of a cracker per day, with as much water as he chose to take. After the first eight days he was allowed to take rye mush and milk, and other light food in abundance. On the tenth day the right limb was placed over a double-inclined plane in the same manner as the other, with the provision of an opening in the board to facilitate the draining of the wound. Abundant suppuration took place, the wound filled up rapidly by granulations, and not a single unfavorable symptom occurred during the whole course of treatment, and in twelve weeks from the day of the accident the boy walked to school, a distance of thirty rods, with as good and handsome pair of limbs as any other boy possesses, with the exception of the right limb being about half an inch shorter than the left. I make no comments on the case, merely stating the facts, and shall let others judge as they may as to the correctness of the practice.

*A Case of Concussion of the Brain followed by Mental Derangement and Paralysis, successfully treated by Sulphuric Ether.* By JOHN TRAVIS, M. D., of Melville, Tennessee.—(Western Journal.)

M. P. æt 25 years, was thrown from a horse against a dwelling house with great force; he was apparently dead for half an hour. His head was bruised and the integuments lacerated. When he revived he was found to be deranged in mind, in which state he continued for six weeks, notwithstanding he had two medical attendants with him daily. On examination, it was ascertained that there was no fracture of the cranium. So soon as his reason returned, his arms to the elbow, and his legs to the knees, became paralysed; he could move neither, which proved that the nerves of motion had lost their power. The function of the nerves of sensation remained unimpaired. In this condition his health otherwise was good. His physicians gave him a variety of medicines, and applied various rubefacients, blisters, &c., for several weeks, but the patient remained in *statu quo*. I was now called upon; I prescribed different articles of the *materia medica*—all in common use, in fact, except strychnia. This I intended to use as a dernier resort; but learning that ardent spirits would in a slight degree excite the nerves of motion, I sent the patient sulphuric ether, and directed him to take a large tea-spoonful in cold water, three times a day. After using this medicine three days he could bear his weight on his feet; and in two weeks he could walk without any assistance, and is now in a manner well, having the use of his arms and legs.

I have thought it proper to make these facts known, as it is a mode of treatment that I believe has not hitherto been pursued, and one which has proved eminently successful in a case which was deemed hopeless by the patient and his friends.



---

*On the Employment of Electro-Magnetic Currents in the Treatment of Paralysis.* By GOLDING BIRD, M. D., F. R. S., &c.—(Ranking's Abstract.)

[Dr. Bird, whose experience of the therapeutic powers of electro-galvanism appears to have been considerable, gives the following classification of the varieties of paralysis in which he has found it decidedly beneficial.]

1. *Case of partial paralysis resulting from congestion or other cerebral mischief, admitting of successful treatment.* The congestion or effusion is removed, but a more or less palsied state of some part of the body remains.—Cases of this kind are common enough; and although the paralysis in general slowly disappears with the cause of the cerebral disorder, still the axiom of "*sublatâ causâ tollitur effectus*," does not always apply. Every now and then, although the blow has ceased, the bruise (if the expression be permitted) remains. Time, friction, change of air, restoration of the general health, strychnia, &c., will all succeed; but when with improved general health the stimulus of the electro-magnetic current be employed, success is much more general and certain. All that is required here, is to apply one of the conductors, covered with wet linen, over the trunk of the largest nerve of the part affected, and to pass the other, similarly covered with linen, over the region of the palsied muscle, so as to keep them actively contracting for some minutes. In recent cases, a single application will often succeed; in more chronic ones, the remedy may be continued for weeks, until the paralysis disappears. One of the first cases in which I used this remedy occurred, about nine years ago, in a gentleman holding a prominent position at the bar. I saw him with Mr. Freeman of Spring Gardens, under whose care he was. This gentleman had palsy of the left side of the face, the relic of an hemiplegic attack following cerebral congestion, the result of intense study and anxiety. His cerebral disease had been cured, his general health restored, but the paralysed nerves of the face alone refused to resume their functions. The electro-magnetic current was applied daily, the patient's footman being the "medical electrician," and in a few weeks he quite recovered.

2. *Paralysis of muscles supplied by the portio dura, following exposure to cold.*—This form of local paralysis, when independent of cerebral mischief, generally yields readily to treatment. Cases, however, occur, in which the nerve remains inactive, and the patient walks about for a long time with a distorted face. The electro-magnetic current is here of great value. I have seen many cases of this kind; one to which I was recently called resulted from exposure of the left cheek of a lady for some hours to a current of air from a broken window. She recovered readily from the accompanying bronchitis, but was left with her features distorted, being drawn to the right side. I at once suggested the current from the apparatus; her maid-servant was the operator, and cured her mistress in a week.

3. *Local Paralysis involving the whole or a part of a limb from exposure to cold.*—This variety resembles the last, and is probably of a rheumatic character; although, it must be confessed, it is often a difficult task to define the line separating rheumatic from some paralytic affections. The following is one of many I have seen:—The actuary of one of the large assurance offices consulted me, with nearly complete paralysis of motion of the left arm, sensation being pretty perfect; no pain whatever in moving the limb. During a cold winter he had been in the habit of sitting at his desk, with the right side of his body roasting by a large fire, whilst the left was chilled by blasts of cold air from a frequently-opened door. Gradually, pain and stiffness appeared in the left arm, but no swelling. The pain gradually vanished, and the limb was left palsied. Other remedies proving useless, the electro-magnetic was applied. I ordered a conductor to be placed over the lower cervical spinal region, to influence the origin of the axillary plexus, the other being passed down the arm. After a few weeks he quite recovered. This gentleman was his own operator; he fastened the spinal conductor in its place by his neckcloth, and thus had the right hand at liberty to apply the other.

4. *Paralysis affecting one side of the body, or a single limb, the result of exhaustion.*—These cases are not unfrequent, and before their nature was understood they used to be fearfully mismanaged, the paralysis being looked to, rather than the cause producing it, and depletion and mercury employed when nutritious food and stimulants were really indicated. It often happens that these cases are directly traceable to an obvious cause, and then the diagnosis becomes easy. The insidious exhaustion and enervation produced by excessive lactation is a not unfrequent cause. I saw a well-marked case of this kind five or six years ago, in a patient under the care of Mr. Pretty, now residing in Mornington road. This lady, a person of weak frame and strumous diathesis, had become exhausted by nursing her third infant, and the left arm became gradually palsied as far as motion was concerned. A generous diet, weaning the child, and the electro-magnetic current, were ordered. I had lost sight of this lady until a few days ago, when I was called to see her sinking from phthisis. I then learnt that, under the treatment suggested, the paralysis had soon disappeared.

Paralysis, from enervation, has occasionally followed sudden loss of blood at flooding labours. I have witnessed complete hemiplegia as the result. A case of this kind I once saw with my friend Mr. Law, of Finsbury, who had most properly treated the lady with generous diet and iron, under which she did well. When under this treatment, in spite of the restoration of the general health, paralysis remains, the electro-magnetic stimulus promises, from what I have seen, to be of much service.

5. *Cases of Rheumatic Paraplegia.*—To this category I refer cases of rheumatism, affecting chiefly the lower extremities, the pain and acute action disappearing, while more or less complete paraple-

gia remains. In these cases I have seen the greatest benefit result from electro-magnetism, as well as from ordinary electricity. I have witnessed so many of these cases thus treated do well, that I can speak with great confidence of its influence. One case will suffice as an example. A man came last summer into Luke's ward, at Guy's, under my care, with complete paralysis of motion of the lower extremities. He was totally unable to move his feet or knees, and was carried into the ward. This state of things had followed the dashing of ice-cold water on his legs and thighs whilst sweating profusely. But little medicine was ordered for this man, and in less than three weeks he, under the use of electro-magnetism, walked about the ward, aided by one crutch and his stick. In these cases one conductor should be firmly pressed against the sacrum, whilst the other is placed in a basin of salt and water, in which the feet are emersed.

6. *Paraplegia the result of enervation?*—I am not quite sure of the pathological correctness of the title I have thus assumed. By it, however, I understand a series of cases in which paraplegia, both of motion and sensation, results from excessive fatigue, from sitting for weeks and months together, during the greater part of the twenty-four hours, with the spine somewhat bent. I knew of one case in which a distinguished physician actually became thus palsied, after assiduously devoting his time to the study of certain phenomena by the microscope, in doing which he, for hours together, used to lean over the instrument. There is, however, another cause, unhappily too rife, of these cases, the miserable result of the utilitarian dogma which makes human labor a marketable commodity, without any regard to the conservation of health. I may perhaps startle some by announcing the fact, that I have, in several instances, seen more or less complete paraplegia among a class of laborers of the most oppressed and most unprotected character. I refer to the needlewomen of this metropolis—a class of girls and women who, to earn enough of the wretched pittance they receive from the agents who employ them, to procure the commonest necessities of life, are often compelled to work for fourteen, sixteen, eighteen hours, or even sometimes longer in the twenty-four hours. They toil on indeed, at the needle until their sight fails as they drop asleep, waking, after snatching a short slumber, to resume their work. These poor creatures receive from three-half pence to four-pence halfpenny for making a shirt (for the latter price producing such as is worn by respectable mechanics and others). They are unable to procure proper food, and are often driven to intemperance to forget their miseries, or to prostitution to add to their wretched income. No wonder that they become exhausted, enervated, bloodless; and paraplegia is not unfrequently the result. I had under my care in the hospital this last summer, a young woman who had once moved in a respectable sphere. She was quite paraplegic. She had been exhausted by working in the way I have described, and declared to me, that excepting dozing in her chair, she had often not slept for two nights



together. She first felt vague pains in the toes, then in the knees; rigidity came on, and ultimately she became as I saw her, the lower half of her body being as powerless as if made of marble.

In many of these cases no organic lesion exists; and by due nourishment, rest in the recumbent position, iron or zinc, and the subsequent application of the electro-magnetic stimulus, recovery generally takes place. These cases are little known, and will continue (we must fear) to occur, so long as the labour of the friendless and dependent female is regarded with no more feelings of sympathy or humanity than the amount of duty performed by a steam-engine or any other machine.

In thus advocating the electro-magnetic current as an important and most valuable excitant of paralysed muscles, I must still acknowledge that it is anything but a universally successful remedy. In the great majority of forms of palsy above described, it is indubitably in some the actual curative agent; in all it expedites and aids the cure, in none is it injurious. As a general rule I think it will be found, *ceteris paribus*, to act most effectually in proportion to the acuteness of the case. In chronic paralysis we must recollect that any new tissue deposited during, perhaps, many months, or longer, although organized like the healthy structure, and provided with its due supply of nerves, is still composed of fibres which have never obeyed the influence of the will—have never moved at the volition of the patient. This I believe to be the reason of our not at once rousing a long paralysed muscle into action. We can here only expect to succeed by submitting the paralysed part for a long period to the influence of the remedy. I cannot conclude without urging upon the profession the impropriety and mischief of using electricity in some cases merely because paralysis exists. In true spinal paralysis, depending upon organic lesion, the electro-magnetic current often does mischief, especially where there is subacute inflammation, or a highly irritable state of the spinal marrow—a state of things shown, among other symptoms, by the involuntary and unconscious starting of the legs. In all such cases the remedy does no good, and in some it does great harm, the effect of its local irritation, when applied to the legs, appearing to be reflected to the spine, and greatly increasing the patient's sufferings.

---

### *Syphilis Infantum.*

To the Editor of the Boston Medical and Surgical Journal:

DEAR SIR.—The case about to be recited has several peculiarities, which render it one of more than usual interest.

1st. The disease showed itself a few days after birth; it commonly does not manifest itself till the fourth or fifth month.

2d. The copper-colored ulcers were diffused over the whole surface of the body; the face and feet having the most blotches, and the anus and pudenda the fewest.

3d. Three previous children had died young of the disorder, that had been treated with mercury, &c.; this, the fourth child, survived under a somewhat modified and different treatment.

CASE — Mrs. S. was delivered of her fourth child. On the next day I found both mother and child doing well. On the fourth day I was desired to see the child, the messenger stating that it was taken like all the rest—"and likely would not stand it long." It will be proper for me here to say that this family was respectable, and both parents apparently healthy. I had no acquaintance with Mrs. S. until her last confinement.

Found the child, which was at first strong and plump, now weak and shrivelled. The infant was hoarse, surface cool, the eyes and nostrils discharging a filthy ichor, and the body covered with ulcers of a copper color. I prescribed—*R.* Pulv. Doveri, gr. j.; protochlo. hydrarg., gr. iv. *M.* Div. in chart No. xvj. Give a powder every three hours, until the infant appears to be under the influence of an anodyne, then give a tea-spoonful of castor oil; when the oil moves the bowels, resume the powders under the same directions. Also apply the following ointment to the ulcers. *R.* Protochlo. hyd., grs. x.; adip., ʒss. *M.* Ft. ungt.

The above plan was pursued for six days, at the end of which time the ulcers were nearly healed, the voice was natural, the spasms had subsided, the extremities warm, &c. Then prescribed—*R.* Syr. rhei aromat., f ʒj.; to be given every evening. At the end of five days discontinued the syr. rhei, and substituted small doses of calcined magnesia, as the child needed some aperient medicine.

The *opium* and *calomel ointment* were in this case strikingly beneficial. The first as a sedative, diaphoretic and antispasmodic, was very useful—as a stimulant, it seemed to arouse the general prostration of the system in a gentle and salutary manner. The latter kept the skin soft; it was applied to the eyes and nose, and, as no other local remedy was employed, its alterative action was obviously serviceable to a high degree.

#### BIBLIOGRAPHICAL NOTICES.

1. *The Half-Yearly Abstract of the Medical Sciences*: being a practical and analytical Digest of the contents of the principal British and Continental Medical Works published during the preceding six months, &c., &c. Edited by W. H. RANKING, M. D., Cantab. &c. Vol. II. No. 2. July to December, 1846. pp. 411. Philadelphia: Lindsay & Blakiston.

In our first volume, we noticed the appearance of this new periodical in the British Medical world, and its re-publication in this country. Since then, (probably through some neglect or error,) the two preceding Nos. were not sent us. The present No., for which we are indebted to the kindness of the enterprising publishers in

Philadelphia, fully sustains the high opinion we have already expressed of its character. The sincerity of our estimate of this half-yearly periodical, may be judged of by our numerous extracts from it.

2. *Encyclopædia Americana*: Supplementary Volume. A popular Dictionary of Arts, Sciences, Literature, History, Politics, and Biography. Vol. XIV. Edited by HENRY VETHAKE, L. L. D., Vice Provost and Prof. of Mathematics in the University of Pennsylvania, &c., &c. pp. 663. Philadelphia: Lea & Blanchard. 1847.

Our kind friends, Messrs. Lea & Blanchard, have placed this volume in our hands, through Mr. Richards, Bookseller, of this city. Although not a medical work, yet in the biographical department, we are pleased to see that in this supplementary volume, the names of PHYSICK, DUPUYTREN, HOSACK, &c., may be found. From a cursory examination, we have formed a high estimation of its worth.

3. *Lectures on Subjects connected with Clinical Medicine*: Comprising Diseases of the Heart. By P. M. LATHAM, M. D., Fellow of the Royal College of Physicians, Physician extraordinary to the Queen, &c. pp. 365. Philadelphia: Ed. Barrington & Geo. D. Haswell. 1847.

This, as the reader will perceive by the cover of the work, is one of those valuable republications, which Dr. Bell, editor of the Bulletin of Medical Science, has so frequently favored the American world. The character of Dr. Latham requires no commendation of ours. The work before us is made up of thirty-eight lectures on Diseases of the Heart, delivered at St. Bartholomew's Hospital, London. It is designed to present these diseases as they occur in the living man, to the medical student, and faithfully has he accomplished his task. This volume should be studied by every practitioner of medicine.

---

### PART III.—MONTHLY PERISCOPE.

*Medicated Milk*.—The Editor of *Gazette Medicale* (for June, 1846.) mentions that there has been lately established at Montrouge, near Paris, an establishment of a novel kind. The physicians who superintend it, thought proper to treat certain diseases by the use of cows' and goats' milk, having first subjected these animals to the medication necessary to give their milk the therapeutic properties which may be required for the cure of these diseases.—*Southern Journal of Med. and Pharm.*



*Strength of the Human Skull.*—Practised anatomists are eloquent in their osteological comments upon the carpentry of the skull. Who that has listened weeks in succession to lectures on the bones, does not recollect how much is said on the arrangement of the arches in the interior of the cranium, which give it great power of resistance: in short, were the frame-work of the head constructed upon any other principle than the one nature adopted, such are the shocks and blows to which it is constantly exposed, the wall would be frequently broken, and the functions of the brain destroyed. But no lecture room demonstration, however ingeniously illustrated, hypothetically, can compare with the following fact. “A few days since,” says the *Amherst Express*, “a son of Mr. Dudley, of Shutesbury, Mass., about five years old, accidentally fell from a cart containing about twelve hundred pounds weight, which passed directly over his head. He received no apparent injury except a slight bruise near the ear made by the wheel.”—*Boston Med. and Surg. Jour.*

*New remedy for Mercurial Salivation.*—Dr. ROBERTSON, of Harrodsburg, Ky., reports several cases successfully treated by a domestic remedy which he has recently discovered. The plant is known by the common names of horseweed, richweed, horsemint, and horsecane. Dr. Griffith, of Philadelphia, to whom the plant was submitted, thinks the plant is the *Ambrosia Trifida*. It was employed in the form of decoction.—*American Jour. Med. Sci., and West. Lancet.*

*Iodine Liniment in Bowel Complaints.*—By J. DUNCAN MACDIARMID. The iodine, in the proportion of a scruple to the ounce of olive oil, is freely smeared over the entire surface of the abdomen, and the operation is repeated as soon as the liniment is absorbed, and the skin has again become dry and colorless, or almost so. In infants two or three applications may, I think, be safely employed in the twenty-four hours, and in the adults more frequently, if necessary—that is, in acute cases; while in those of a chronic form, probably its free application once a day would be the more advisable plan. But in all, I would only employ the liniment as an adjunct to the ordinary treatment, which, however, by itself, is often very unsuccessful in the bowel complaints of children during the hot months.—*Brit. Amer. Jour. Med. and Phys. Sci., and Ibid.*

*Castor Oil in Diseases of Mucous Membranes.*—Dr. Thompson recommends an emulsion of castor oil, in bowel complaints. The following is his mode of employing it for young children: R. Castor oil, 3j—jss; Yolk of egg, ss.; fennel water, 3j. Mix. Take a small spoonful twice a day. This mixture, it is alledged, will change the character of, evacuations more readily than mercury. Laudanum is sometimes added. It is even recommended when inflammation is present. Of course the dose would vary with age and other circumstances.—[*Monthly Journ. Med. Science, and Ibid.*

*Mode of using Quinine.*—An opinion is rapidly gaining credence in the United States, that *large* doses of quinine given at long intervals, are more efficacious than the same quantity in small and frequently repeated doses. Foreign experience corroborates this view. Dr. Graves is now disposed to give it in large doses, *and these only when the paroxysm recurs*. He is of opinion that the practice of giving quinine after the fits have ceased, is injurious, because the system becomes accustomed to the medicine, and its anti-periodic influence is measurably lost. M. Bretonneau advocates large doses; and he is of opinion that small, frequently repeated doses impair the digestive function, without so effectually curing the disease.—[*Western Lancet*.

*Efficacy of Creosote on Papular Affections of the Skin.*—M. Max. Simon has recently published some observations relative to the treatment of papular diseases of the skin when they have become chronic. The application which he has found most beneficial is an ointment of creosote, made as follows:

|             |                   |                             |
|-------------|-------------------|-----------------------------|
| Lard, - -   | 3ij.              | } To be made into ointment. |
| Creosote, - | $\frac{1}{2}$ dr. |                             |

[*Ranking's Abstract*.

*Drastic Potion.* (*Journal des Connaissances Médico-Chirurg.*)—Dr. Tessier has often proved the excellent effects of the following formula in the paraplegic:

Take, Water of the Linden tree, - 125 grammes.

Brandy, - - - - - 30 do.

Wine of Colchicum, - - - 30 do.

Syrup of Buckthorn, - - - 30 do.

Tartar Emetic, - - - - 25 centigrammes.

Make a potion for three doses, half an hour apart. M. T. omits one day, and then prescribes again this drastic potion, which he continues every second day until a cure is effected.

*Comparison of the efficacy of Tr. Iodine diluted and vinous injections in Hydrocele.*—In the January No. of the *Journal des Connaissances Médico-Chirurg.* just received, is an interesting case on this subject, published by M. Bouisson, Prof. of Clinical Surgery to the Faculty of Medicine at Montpellier. A patient entered the hospital having double hydrocele, and for which he was operated simultaneously, on one side with red wine injected into the tunica vaginalis testis, and on the other with diluted tinct. of iodine. There was much pain and inflammation, with great tumefaction, developed on the side to which the wine was applied, and neither were appreciable in the other. The iodine too, had cured one side long before the other. Altogether, this case proved most decidedly the superiority of the modern (iodine injection), over the old (vinous) mode of treating hydrocele.

---

*Tincture of Iodine in Inflammation of Bones.*—In cases of inflammatory swelling of the bones, M. Siehever commences by making incisions; then he applies twice a day frictions with the tincture of iodine until the epidermis assumes a deep brown color. Before each friction, he slightly detaches with the finger nails the epidermic crust which covers the incisions. The author has obtained numerous successes by this mode of treatment.—[*Jour. des Connais. Méd. Chir.*

---

*Treatment of incontinence of urine by Benzoic acid.* (*Gazette Médicale.*)—M. de Fraene, accoucheur at Tubize, reports the case of a girl of 15 years, who after several attacks of acute gout, had incontinence of urine, which, owing to a false delicacy on the part of the mother, was neglected for the space of four months. A tonic and aromatic treatment was adopted, but without effect. She was then put upon the use of the benzoic acid, night and morning, for four days, but the complaint persisted. The doses were then doubled, and after the first dose the disease immediately ceased. The medicine was continued for some days in the same doses, and afterwards in quantities gradually diminishing. She had no return of the disease.

---

*Process for finding easily the urethra after amputation of the Penis.* (*Jour. de Méd. de Bordeaux—Gazette Médicale.*)—The difficulty of finding the urethra after amputation of the penis, is one of the most serious obstacles in this operation, and one which has most called into exercise the inventive genius of surgeons. To the well known process of M. Barthélemy, M. Chaumet prefers the following:

Before amputation, a catheter is introduced to evacuate the urine, through which an emollient fluid should be injected into the bladder. The urethra is compressed at the root of the penis by an assistant. The penis is now amputated, and to find the orifice of the canal, all that is necessary is to suspend the compression, and to direct the patient to yield to the desire which he feels, to urinate. The flow of the liquid indicates the urethral orifice.

---

*Prolapsus of the Rectum treated with concentrated Acids.* (*Allgemeine Medicinische Central Zeitung—Journ. des Con. Méd. Chir.*)—Dr. Jaesche of Minsk, having tried the means proposed for the cure of prolapsus ani, by Dupuytren, in four cases without success, was led to employ the sulphuric acid. He applied a pledget of charpie, wet with this acid, to the anus of a young man affected with this disease, and also with hypochondriasis. This tampon was introduced into the bowel to the depth of several lines. It produced great pain, which ceased in some hours, and the excavations produced by the cauterization promptly disappeared. The prolapsus reappeared at the end of a week. It was again successfully treated by this cauterization. This was repeated several times with success, and during four months that the patient remained in the hospital, the complaint did not reappear. Dr. J. employed the acid in several other cases, and the cures were permanent.



The nitric acid produces the same curative effect as the sulphuric, and it possesses the advantage of producing less pain and excoriation. In an old woman laboring under ascites, there existed a prolapsus ani which was treated with applications of nitric acid, and the disease did not reappear for six weeks, notwithstanding the use of drastics given for the relief of the ascites. The disease was soon reproduced by a diarrhœa with tenesmus, but was again cured by the application of the nitric acid, which produced no pain. The fuming nitric acid employed in another case produced violent pain, and excoriations, but the cure was rapid and complete. These and other facts have led the writer to regard the nitric acid as an excellent means of treating prolapsus ani without producing much pain. He does not recommend it as absolutely certain, but as at least superior to all others, especially to the extract of *nux vomica*.

*Ung. Hyd. Potassæ in Erysipelas.*—Dr. Griscom stated that he had occasion to prescribe *Ung. Hydrarg.* to be applied to an erysipelatous surface, and that the apothecary made a mistake, and gave *Ung. Hyd. Potassæ*, which had been applied, with the effect of removing the erysipelas almost immediately.—[*N. Y. Jour. Medicine and Surgery*.

*Midwifery Statistics.*—A reviewer in the March number of the *Archives Générales* gives the following general results of Midwifery Statistical Tables, recently published in the Italian and English Journals. In 47,116 labors, twins occurred 446 times, (9 4-10 per thousand,) triplets four times, (1 in 10,000.) There were 40,233 head presentations, (969 per 1000,) of which 40,046 were vertex, and 187 face. There were 1065 breech or footling presentations, (27 per 1000,) and 154 transverse ones, (4 per 1000.) Of these labors, 46,632 terminated naturally, (989 per 1000,) and 484 (11 per 1000,) artificially,—viz: 221 by means of the forceps, 89 by craniotomy, 54 by turning, and 20 by vaginal or uterine hysterotomy.—[*Medico-Chirurgical Review*.

*Incompatibles with Corrosive Sublimate.*—It may be useful to know the vegetable infusions, decoctions, and tinctures, which decompose corrosive sublimate. Any pharmaceutical preparation containing one or more of the following substances will produce this effect; but the rapidity with which the decomposition takes place varies in different instances. 1st. Substances that decompose corrosive sublimate slowly, throwing down calomel: marsh mallows, bitter sweet, columba, oak bark, sarsaparilla, quassia, gentian, resin of guaiacum. 2d. Substances that decompose corrosive sublimate instantly, forming particular mercurial compounds: opium, cinchona. The result of the decompositions produced by the first group is to diminish extremely the activity of the corrosive sublimate: thus, this medicine mixed in ordinary dose, with decoction of sarsaparilla, and adminis-

tered for an indefinite period, will rarely salivate. The decomposition produced by cinchona does not, on the contrary, seem to interfere materially with the virtues of the medicine: we know that one of the most favorite modes of administering corrosive sublimate is, dissolved in tincture of cinchona.—[*Southern Jour. Med. and Pharm.*

*Employment of Gun-Cotton in Cupping.*—The Provincial Med. and Surg. Journal of Dec. 9th, contains the following announcement: "It may be useful to know the value of gun-cotton in exhausting the air from cupping glasses; having so employed it myself on several occasions, I can recommend it as possessing a decided superiority over spirit; besides, its lightness and portability is an advantage at times. A very small portion is placed within the glass, and before a piece of lighted paper can be well introduced, from its highly inflammable nature it becomes ignited, imparting to the surface enclosed merely an agreeable warmth."—[*Medical Examiner.*

*The Asiatic Cholera in Persia.*—According to the Gazette Médicale, six Princes and several Princesses of the Court of Persia have been cut off by the Asiatic cholera. The mother of the Prince Royal, and the only daughter of the Schah, had been attacked, but had recovered under the treatment of Dr. Cloquet. Among the victims is the celebrated Mirza-Aboul-Assan-Khan, minister of Foreign Affairs, —who was ambassador to this country in the year 1820. Another minister of the Schah, the Visier of the Prince Royal, and other high functionaries of the Court, have also been cut off by cholera. The disease appears to have been particularly fatal among the upper classes. It was spreading in all directions, and had taken the course of Astrachan and Moscow. It was expected, however, that its progress would be arrested by the cold of winter.—[*London Med. Gaz.*

*The Stereoscope* is a new instrument invented by M. Cornay, for applying auscultation to the detection of vesical calculi, and even of foreign bodies in the soft parts of the body. The instrument resembles a common catheter, and presents at its free extremity a sort of broad pavilion, somewhat resembling that of a speaking-trumpet.

[*Medical Times.*

*Method of Disguising the Nauseous Taste of Castor Oil.*—In order to obviate the nausea so frequently produced by castor oil, M. Righini proposes to mix it with syrup and gum arabic in the following proportions—

|                      |           |          |
|----------------------|-----------|----------|
| Castor oil           | . . . . . | 30 parts |
| Sugar                | . . . . . | 30       |
| Water                | . . . . . | 100      |
| Powder of gum arabic | . . . . . | 8        |

This is made into an emulsion, and the juice of an orange is squeezed into it.—[*Medical Gazette.*

*Preservative from the cicatrices of the variolous pustule.* (Journal de Pharmacie—Journ. des Connaissances Médico-Chirurgicales.)—Dr. Thielmann prescribes the following collyrium when small-pox has reached the period of suppuration, when the eyelids were covered with pustules, and much swollen :

R. Bichloride of Mercury, - 5 centigrammes.  
 Distilled water, - - - 180 grammes.  
 Sydenham's Laudanum, - 4 grammes. M.

This collyrium may be applied once a day by means of compresses. Dr. T. has seen this application dry up voluminous, confluent and inflamed pustules, without leaving the slightest trace.

*Combination of Bichloride of Mercury with Tartar Emetic.* (Bulletin de Thérapeutique.)—M. Bertini, of Turin, has obtained very good effects from the following formula, proposed by Stenay :

R. Purified Hog's lard, - - - 48 grammes.  
 Tartar Emetic, in powder, - 8 grammes.  
 Bichloride of Mercury, - - 30 centigrammes.

Mix well together. After two, or at most three frictions, this ointment develops numerous pustules, which suppurate more rapidly, than those produced by the tartar emetic alone.

*The Marchand Remedy for Hydrophobia.*—For more than forty years a family by the name of Marchand, residing in western Pennsylvania, has had great notoriety for making and vending a nostrum for the prevention and cure of hydrophobia. Quite recently I had an opportunity of examining this nostrum, and send you the result.

The potion consists of three boluses, and in each bolus is a pellet of paper closely rolled. On unrolling the pellet carefully I was enabled to read the following words written in a fair hand:—"Margarat, Feragat, Magulat." Of course the efficacy of the bolus resides in the magical words.

A fatal case of hydrophobia occurred last month in Alleghany; the friends had procured the Marchand nostrum, and I was thus enabled to see the bolus for the first time.—[*Medical News.*]

*Short Rules for the Preservation of the Teeth.* By A. C. DAYTON, Dentist, Shelbyville, Tennessee.—The first, and by far the most important rule is this: *Preserve perfect cleanliness* of the teeth, and the parts around them. In many mouths this cannot be accomplished without much care and trouble. It is not enough that the brush be passed over the outer surface of the teeth, (or that next the cheek and lips,) but the grinding surfaces, and the surfaces facing inwards towards the tongue, should be brushed with equal care. And even this is far from being sufficient, for particles of food and the secretions of the mouth are liable to lodge and remain between the teeth, where the brush cannot touch them. The best method to remove these is that suggested by that eminent dentist, Dr. Parmlly. He



advises to pass a little floss silk through each interspace, at least once every day. If the floss cannot be procured a good substitute may be prepared by taking the twist out of sewing silk. This will cleanse those surfaces which the brush cannot reach. If this be considered too troublesome, let every particle of food be carefully removed with a tooth pick, made of a quill, after each meal.

2nd. Do not use *pins*, needles, knives, or metallic tooth picks. They are liable to break the enamel, or wear it away. If there are plugs in the mouth, they roughen their surface, or, it may be, start them from their places.

3rd. Do not expose your teeth to sudden and extreme changes of temperature by taking alternately very hot and very cold articles into the mouth. The pulp or nerve of the tooth may take on inflammation from this cause, or the sudden expansion and contraction of the enamel may cause it to crack, and so to admit the fluids of the mouth to act upon the bone of the tooth, which the enamel was designed to protect. It is well to rinse the mouth after eating, but the water should not be very cold, and you should wait until your teeth have had time to cool a little before applying it.

4th. Do not eat exclusively on one side of the mouth. Nature intends the teeth for use. They require *exercise* as much as any other part of the body. Their proper exercise is in the mastication of the food. Those which are not used, become, after a certain time, slightly sore, or tender to pressure, are often heavily coated with tartar, and feel as though they were slightly loose in their sockets. If possible, treat both sides alike.

5th. Take special pains to cleanse the mouth in sickness. A neglect of this is a frequent and most effective cause of the loss of the teeth. Many persons date the commencement of decay back to some spell of sickness; and they often attribute to the medicine, a result which is the consequence of their own neglect. The secretions of the mouth are then more acrid and more liable to act upon the enamel. And yet it often happens, that during the whole period of one's confinement by disease, not the slightest attention is given to this matter. If the strength of the patient will at all permit, the same means should be used to secure perfect cleanliness which I have recommended to those in health, and they should be employed more frequently.

As soon as practicable after recovery from sickness, the teeth should be carefully examined by a dentist in whom you have confidence, and any incipient decay checked at its commencement. Much mischief may in this way be prevented by a little trouble. This is especially necessary when the patient has been salivated.

6th. Avoid the free or frequent use of acids. These act upon the enamel chemically, and decompose it. Very sour fruits, as green grapes, lemons, &c., "set the teeth on edge." The sensation described by this expression is produced by the decomposition of a very small portion of the enamel. Some of the stronger acids act more

rapidly. The common solution of quinine is prepared by the aid of a small quantity of sulphuric acid. The elixir of vitriol is also composed in part of this acid. Both these medicines are in common use as tonics. In some cases of diseased liver, a solution of nitric acid is given by physicians. All these, and other preparations of the kind, exert a fatal influence upon the teeth. It is not our province to interfere with the medical treatment of disease, but it cannot be amiss to suggest a remedy for the ill effects of these medicines, when it is thought necessary to prescribe them. It is this: Have close at hand a quantity of water in which a little salætatus, pearlash, or carbonate of soda has been dissolved, and the moment you have swallowed the acid medicine, rinse your mouth thoroughly with this solution. It will neutralize the acid, and prevent its *continued* action. It is not sufficient to imbibe the medicine through a quill or tube, as is generally practised. Every one who will try it, will be conscious that, in every act of swallowing, more or less of the fluid spreads over the whole mouth. It may slightly diminish the evil, but it will not prevent it.

7th. Abandon the silly resolution which many persons adopt—"that they will not trouble their teeth, while their teeth do not trouble them." In a majority of cases, when a tooth has become painful, it is too late to save it. In many instances, they decay away, and often affect the general health in an alarming degree, without becoming painful at all. If you desire to shun the consequences of diseased teeth, you must not wait until *pain forces the disease upon your attention*. The *best* time, and often the *only* time, to restore a decaying tooth to perfect health, is before the caries has reached the nerve. Consequently, if you have decayed teeth, and intend to preserve them *at all*, do not delay. If you can have access to a dentist in whose skill you can confide, go to him at once. Very often a slight and simple operation, costing little in pence, pain, or patience, will *prevent* disease which it might be very difficult to cure.

[*Dental Intelligencer*.

#### HOMŒOPATHY.

"The homœopathic system, sir, just suits me to a tittle,  
It proves of physic, any how, you cannot take too little:  
If it be good in all complaints to take a dose so small,  
It surely must be better still to take no dose at all."

[*Western Lancet*.

#### MEDICAL INTELLIGENCE.

*Our Journal*.—We cannot but be gratified with the many kind expressions of encouragement in our work, which have recently reached us from many sources. We seldom take up a medical journal, of the twenty now published in this country, without finding in them, some extract or notice of matter derived from the Southern Medical and Surgical Journal. In the last No. of Ranking's half-

---

yearly Abstract, is an article credited to this source. While we propose to labour diligently in our enterprise, we respectfully remind our friends that we cannot succeed without their aid and efficient co-operation. Now that accounts have been collected and professional business not very urgent, we solicit the report of cases, observations on diseases, &c., &c.

---

*Discontinuance of the Bulletin of Medical Science.*—Edited by JOHN BELL, M. D., &c., of Philadelphia. The December No. of this Journal contains the farewell of Dr. Bell. For twenty-five years he has been actively connected, as editor of a Medical Periodical or select Medical Library, and has his name identified with the medical literature of his country. He will long be gratefully remembered by his numerous friends, for his valuable contributions to our noble calling, and we but utter the prayer of all, that he may live to reap the fruit and reward of his faithful labours.

---

*A fifth School of Medicine in Philadelphia.*—For nearly half a century one school of medicine located in Philadelphia, was amply sufficient, not only for that city and the State of Pennsylvania, but for nearly all the other United States combined. About 1825, a second one was incorporated in the same place, and now within as many years, three more have been chartered by this one State and all located in the same city. The fifth and last one is called the Philadelphia College of Medicine, and judging from the number of the Faculty, one might suppose that Professors were getting scarce after so liberal a supply of late. The two eldest institutions have each seven Professors, the third and fourth six a piece, and the last has only four. They are Drs. T. D. Mitchell, James McClintock, W. H. Allen, and J. R. Burden—the two first named, known by their public works to the profession.

---

*National Medical Convention.*—We perceive by our exchange Journals, that the profession at the North is fully aroused on this subject. Even the University of Pennsylvania has appointed delegates, among whom is the venerable Dr. Chapman. We sincerely hope the south will not be remiss in its duty on this important subject, but that every State and medical association in this section of our country will be fully represented at the meeting of this body.

It will be recollected by our readers, that a preparatory Convention was held last year at New-York, which, after appointing various Committees, &c., adjourned to meet next May in Philadelphia. These committees, we have reason to know, have been active in endeavoring to obtain information, and to excite an interest on the subject of Medical Reform throughout the United States.

The Medical College of Georgia, claims to have early urged the propriety of an extension of the present course of Lectures; indeed, she commenced by establishing six months, from October to April.

Drs. Dugas and Garvin are the Delegates appointed on the part of the Faculty.

---

*Dr. Lamar, Surgeon in the U. S. Army.*—Dr. John T. Lamar, who has been acting as assistant Surgeon to the Georgia Regiment, now in Mexico, has, we are pleased to learn, been appointed by the President, Surgeon, under the Ten Regiment Act just passed by Congress. He is a native of our city, and a graduate of our Medical College.



*Obituary of Tommasini. Bérard, Bostock and Thompson.*

We notice in the Foreign Journals the death of the celebrated Italian physician, Prof. Tommasini, author of the contra-stimulant doctrine of Medicine.

Also, that of Augustus Bérard, one of the Professors of Clinical Surgery in the School in Paris. He was, we believe, a younger brother of the present Professor of Physiology, in the same institution, Philip Bérard.

Dr. Bostock, known as the author of a work on Physiology, died recently in London, aged seventy-three.

And at Edinburgh, Dr. John Thompson, late Professor of General Pathology in the University of that city, aged eighty-two years. He left a collection of colored pathological drawings, with the histories of the diseases attached, worth \$10,000. His two sons are Professors.

*A Triplet Rib.*—We have received from our esteemed contributor, Dr. Mayes, the drawing of a *Triplet Rib*, the history of which, with the specimen, has been promised for the Museum of the Medical College of Georgia. As the rib proceeds forward from its angle it separates into three bodies, and they are attached by as many cartilages to the sternum.

METEOROLOGICAL OBSERVATIONS, for January, 1847, at Augusta, Ga. Latitude 33° 27' north—Longitude 4° 32' west Wash. Altitude above tide 152 feet.

| JAN. | Sun Rise. |           | 2, P. M. |           | WIND. | REMARKS.                         |
|------|-----------|-----------|----------|-----------|-------|----------------------------------|
|      | THER.     | BAR.      | THER.    | BAR.      |       |                                  |
| 1    | 57        | 29 89-100 | 74       | 29 86-10  | S.    | Fair—blow and dusty.             |
| 2    | 58        | " 90-100  | 56       | " 86-10   | W.    | Rain 65-100.                     |
| 3    | 48        | " 95-100  | 51       | " 93-100  | N. W. | Cloudy.                          |
| 4    | 56        | " 76-100  | 66       | " 59-100  | S. W. | Cloudy—rain 20-100.              |
| 5    | 47        | " 75-100  | 63       | " 80-100  | N. W. | Fair.                            |
| 6    | 34        | " 81-100  | 64       | " 77-100  | N. W. | Fair. [55-100.                   |
| 7    | 55        | " 40-100  | 39       | " 53-100  | N. W. | Fair—gale in morning—rain        |
| 8    | 18        | 30 19-100 | 35       | 30 18-100 | W.    | Fair.                            |
| 9    | 20        | " 20-100  | 46       | " 15-100  | W.    | Fair.                            |
| 10   | 32        | 29 96-100 | 44       | 29 84-100 | N. W. | Cloudy. [night 15-100.           |
| 11   | 40        | " 80-100  | 49       | 30        | N. W. | Fair—blow—rain during last       |
| 12   | 26        | 30 19-100 | 53       | " 21-100  | N. W. | Fair.                            |
| 13   | 27        | " 20-100  | 56       | " 15-100  | S.    | Fair.                            |
| 14   | 38        | " 3-100   | 60       | 29 95-100 | S. W. | Cloudy.                          |
| 15   | 44        | 29 89-100 | 64       | " 85-100  | S.    | Cloudy.                          |
| 16   | 60        | " 79-100  | 70       | " 80-100  | S. W. | Cloudy—rain 70-100.              |
| 17   | 46        | 30        | 50       | 30 4-100  | E.    | Cloudy.                          |
| 18   | 46        | 29 92-100 | 55       | 29 78-100 | S.    | Drizzly.                         |
| 19   | 57        | " 80-100  | 56       | " 82-100  | S. W. | Drizzly.                         |
| 20   | 42        | 30        | 40       | " 97-100  | N. E. | Rain 65-100.                     |
| 21   | 35        | " 2-100   | 45       | 30 10-100 | N. W. | Fair.                            |
| 22   | 24        | " 20-100  | 45       | " 18-10   | S. E. | Fair.                            |
| 23   | 29        | " 5-100   | 34       | 29 95-10  | S. E. | Rain, } 85-100.                  |
| 24   | 41        | 29 90-100 | 46       | " 79-10   | N. W. | Rain, }                          |
| 25   | 44        | " 91-100  | 48       | " 92-10   | E.    | Cloudy—drizzly.                  |
| 26   | 48        | " 92-100  | 50       | " 83-10   | S. E. | Cloudy—drizzly.                  |
| 27   | 46        | " 82-100  | 57       | " 93-100  | N. W. | Fair. [75-100.                   |
| 28   | 35        | 30 19-100 | 47       | 30 14-100 | N. E. | Cloudy—gale at night—rain        |
| 29   | 49        | 29 58-100 | 52       | 29 50-100 | W.    | Cloudy—drizzly.                  |
| 30   | 37        | " 70-100  | 54       | " 73-100  | W.    | Fair.                            |
| 31   | 31        | " 76-100  | 54       | " 70-100  | E.    | Fair, but light floating clouds. |

14 Fair days. Quantity of Rain 4 inches and 50-100. Wind East of N. and S. 8 days. West of do. 19 days.

# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—APRIL, 1847.

[No. 4.]

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE XI.

*An Essay on Turning.* By FRANCIS S. COLLEY, M. D., of  
Hancock county, Ga.

Turning is the rectification of a mal-presentation of the fœtus *in utero*, or its entire version by which some other presentation is substituted for one less favorable to delivery.

Systematic writers on Midwifery divide turning or version into three kinds, to wit:—1. Cephalic, 2. Pelvic, 3. Podalic.

By the term *cephalic version* is meant the grasping of the head of the fœtus, and bringing it over the superior strait of the pelvis of the mother. This process of turning is attended with some danger to the mother, but it is, perhaps, the most safe to the child. It was the mode principally practiced by the ancients, from the belief, that a majority of children were born head foremost, and that consequently it was the most natural. They, therefore, pursued this exclusive practice, except in cases where the fœtus proved to be dead, previous to the time of Ambrose Paré, Guillemeau and others, who demonstrated its fallacy.

*Pelvic Version* consists in bringing the pelvis of the child to the superior strait, and delivering the fœtus as in a common breech case. This mode of version, like that already described, is not exempt from danger to the mother and child, but the child most frequently suffers.

*Podalic Version* is effected by grasping the knees, or one or both of the feet of the fœtus, and making an entire version of the child, and delivering the woman by means of traction upon the child. This, like the other versions, is dangerous to mother and child, but most dangerous to the child. In a majority of cases in which turning is

necessary, the podalic version is to be preferred. It has the advantage of giving the entire control of the case to the practitioner, thereby enabling him to terminate it earlier, by being able to act, in many instances, independently of the uterine pains or contractions.

The examination into the situation of his patient should be the early duty of the practitioner of Midwifery, and although he may have had years of experience in his profession, too much reliance is not to be placed on external signs manifested at the time of parturition. He should, therefore, as early as convenient, after his arrival, make a vaginal examination, not only to ascertain the progress of labour, but in first cases of delivery, to ascertain the *capacity* of the pelvis and condition of the parts generally.

By this, or a subsequent examination, he may find the head, breech, knees, back, abdomen, breast, neck, shoulder, arm, or hand presenting.

Before attempting to rectify a mal-presentation of the head, breech, feet, or other parts, it is necessary to *wait* until a partial or complete dilatation of the mouth of the uterus takes place, or until it becomes soft and dilatable, together with the soft parts, and to act *before* the rupturing of the membranes.

Dr. Churchill says we are "not to interfere rashly on the one hand, nor to delay too long on the other: of the two errors, it is hardly too much to say, that excessive delay is the more serious." After ascertaining the presentation, and waiting as before indicated, we proceed to make such version as the case requires.

In transverse presentations the head having been ascertained to be the most dependent part, the pelvis of the mother of sufficient size, or slightly contracted antero-posteriorly, the head of the child of the ordinary dimensions, or if there should be a slight obliquity, or mal-presentation of the head, or should the neck and shoulder present, and there are no untoward symptoms present indicating immediate delivery, the cephalic version should be preferred.

We can not, however, terminate labour by this species of turning. After our manipulation it would progress as a natural case, if we did not use the forceps.

Cephalic version is not to be relied on in cases in which prompt delivery is necessary.

In those cases in which the pelvis of the child is most dependent, or near to the superior strait, with but little or no distortion of the pelvis of the mother, neither an abnormal enlargement of the fœtal



cranium, nor complete ossification of its bones—or where, in short, the symptoms present do not indicate *immediate* delivery, the pelvic version is to be preferred.

*Podalic Version* should be preferred generally to all other modes of turning, and should be performed, if possible, in cases of malpresentation of the superior extremities, or trunk of the foetus, placenta-prævia, flooding, exhaustion, convulsions, prolapsed funis, rupture of the uterus, or in any case requiring speedy delivery.

There must be, however, a just proportion between the mother and the child, or a capacity of pelvis sufficient for the child to pass. Many reasons might be assigned for giving this mode of version the preference, and I cannot do better than quote from Dr. Churchill on this subject. The Dr. says, that “the peculiar advantages of version by the feet are :

1. That it gives to the operator the entire control over the whole process of the labour, so that he can regulate its duration, either acting with, or independently of the pains.

2. That though inferior in its results to labour with the head presentation, it is about equal to any other and superior to some.

3. That in some cases it is the only chance of saving the child's life, or avoiding evisceration.

4. That in certain cases it affords a probability of saving the mother's life, when other means are hopeless.

On the other hand, continues Dr. C., its *disadvantages* are not to be overlooked ; for—

1. From the distance the hand has to traverse, and the difficulty of seizing the feet and of turning the child in utero, there must ever be a fearful risk of injury to the mother.

2. The mortality amongst the infants thus brought into the world is very great : about one to three.”

Podalic version may probably be divided into four stages or periods :

1. The introduction of the hand into the uterus.

2. The searching for the feet of the child.

3. The grasping and bringing down the feet.

4. The delivery of the woman.

Before the practitioner of Midwifery decides upon performing this, or any of the other modes of version, it is indispensably necessary for him to weigh well the case, for a mistake in diagnosis might not only prove dangerous to the parturient female and her offspring, but even fatal to both.

It would be well for him to attend to the following general rules, before he attempts to perform any of the modes of version, to wit:—

1. If the case be difficult, let him call in a professional friend to consult.

2. Having determined upon performing the operation of version, he should *inform his patient what he is about to do and encourage her as much as possible.*

3. Next let him ascertain what position the child occupies in utero, if he can:—this knowledge may save time and prevent pain and inconvenience,—it will also enable him to make the selection of which hand he should use.

4. The selection of the hand will depend upon the position of the child, “if the occiput,” says Dr. Churchill, “is to the left, whether posteriorly or in front the *left* hand is to be employed; when to the right, either in front or posteriorly, the *right* hand must be selected.

5. If not previously done, the bladder should be evacuated with the catheter, and the rectum by saline injections, and the system otherwise prepared as circumstances may require.

6. The practitioner should divest himself of his coat, *without show or parade.*

The above rules having been attended to, so far as they are applicable to any given case, the practitioner may then proceed to the operation.

He will select such position for the patient as shall best comport with her ease and comfort, compatible with his own duties,—one which will allow him, at the same time, the greatest freedom of action. The most common position for the woman is on her back, with her nates upon the side or edge of the bed or matrass, and the extremities supported by two assistants upon two chairs. Other positions have also been recommended, as the side, and hands, and knees. The operator should lubricate well, with lard, fresh butter, or oil, the dorsal surface of the fingers, hand and forearm, and place himself in front, or some other position convenient to the patient, and gently insinuate his fingers and hand edgewise through the *labia majora* and other soft parts into the vagina. After having reached the vagina, which is done during the absence of pain, the thumb and fingers are to be brought in apposition, in the form of a cone, and gently and slowly passed through the mouth into the cavity of the uterus. The operator should introduce the hand first in the direction of the inferior, and then of the superior strait.

Having thus entered the uterine cavity, we may proceed to rectify any mal-presentation of the head of the child that properly and most appropriately belongs to cephalic version, or we may, by pushing forward, bring down the breech, or we may search for and seize the knees or feet, make the podalic version by bringing down these parts, and deliver the patient as speedily as prudence and propriety may dictate.

If uterine contractions should come on whilst our hand is in the cavity, the hand must be extended, and permitted to remain perfectly quiescent until they have subsided, or we run the risk of rupturing the uterus, and rendering the case more complicated and more dangerous. Our efforts at turning, therefore, must be exerted in the absence of pain, and cease upon its return. During our manipulations within the cavity of the uterus our unoccupied hand should be placed upon the abdomen to assist in the turning.

The practitioner of Midwifery should ever be vigilant in the discharge of his various duties, and when at the bed-side of his patient, watch and mark well every symptom which may present itself. In this way, he may be enabled at an early period of labour to detect any case which may require any of the modes of version proposed, and those in which neither are practicable.

The version cases may be divided into three classes or kinds, to wit : 1. Easy, 2. Difficult, 3. Impracticable.

In the first instance, a slight inclination of the head of the child from its natural direction, the membranes whole or recently ruptured can be *easily* rectified. The breech or feet may, in a capacious or well-formed pelvis, and where there is no deformity of the child, be easily seized and brought down just after the rupturing of the membranes. If the waters have been evacuated for several hours, and by the downward contraction of the uterus the child is partially wedged into the pelvis, the case becomes one of *difficulty*.

In cases of distortion of the pelvis, lessening the antero-posterior diameter to two inches or under; a mal-formation in the inferior strait; the waters having been evacuated for many hours; the uterus firmly contracted down on the child, which is tightly wedged into the pelvis; a shoulder, arm, hand, foot, or some other part presenting; an enlarged head completely ossified, or filled with fluid, neither a cephalic, pelvic, or podalic version may be practicable.

Fortunately indeed is it for the parturient female, that version of any kind is seldom necessary or proper. In ninety-nine out of one



hundred cases in which it becomes necessary to perform it, the case has been previously in the hands of some ignorant empiric or meddling old woman, and the unfortunate female is not seen by the scientific physician until the powers of nature are nearly, or quite exhausted, and she almost *in articulo mortis*.

It should be a pleasing reflection to the educated, the high-minded, and the honorable members of the profession, that the veil of ignorance is being withdrawn, that science is beginning to be appreciated, that superstition flies before it, and that in a few more years this charlatanism will cease—then the practice of Midwifery will be confined to those qualified to discharge the various duties incumbent on them, with honor to themselves and benefit to their patients.

---

ARTICLE XII.

*A Case of Pregnancy and Parturition during the existence of Cancer of the Uterus.* By JOSEPH A. EVE, M. D., Professor of Obstetrics, &c., &c., in the Medical College of Georgia.

Carcinoma of the uterus was formerly supposed to be incompatible with pregnancy; but the possibility of this complication with this disease in all its stages is acknowledged, and its influence in hastening its progress admitted, by all or nearly all authors who have recently written on the diseases of females. A record of cases, or an allusion to this unfortunate complication, will be found in the works of Clarke, Davis, Ashwell, Churchill, Ramsbotham, Waller, Ferguson, Duparcque, Colombat, Boivin & Duges, Velpeau, Siebold, and many others. But it is, in an excellent practical treatise on Organic Diseases of the Womb, by Mr. Lever, of London, that we find the most satisfactory account of pregnancy in connection with cancer, and the most extensive reference to cases.

Pregnancy and cancer have each a prejudicial influence over the other—the former hastening the progress and fatal termination of the latter; and the latter in a considerable number, I believe in a large majority of cases, causing either an abortion or the death of the *foetus* when delivery occurs at the full term. The *foetus* sometimes perishes in utero, its farther development being prevented, and abortion the necessary consequence; in other instances the death of the *foetus* is the result of impediment to delivery, from the schirrous enlargement of the mouth or neck of the uterus.

---

Of one hundred and twenty cases of malignant disease of the uterus, referred to by Mr. Lever, abortion occurred in forty per cent.; in twenty-seven of delivery, fifteen children were born dead, ten living and in two the result was not known, or we may say fifteen out of twenty-five were lost.

The object of the present communication is to give a brief history of a remarkable case of pregnancy and parturition in connexion with cancer of the uterus.

July 28th, 1845. I was called in haste, eleven or twelve miles in the country, to visit Mrs. ———, who I was informed had been some time in violent labour. There was considerable time lost in consequence of my absence from town. On my first examination I found the head very low in the pelvis, the mouth of the womb extinguished, except a small portion, which had a tumid, hard, rough, unnatural feel. This labour was far more difficult, painful, and protracted than her two preceding labours, in which I had attended her. The child was expelled about a half hour after my arrival. I remarked a smell very similar to that of cancer of the womb, but did not at the time suppose it possible that it could be identical with it, for she was apparently in most excellent health, remarkably robust and stout, weighing not less than two hundred and fifty pounds, and being about twenty-eight years old, and furthermore, as the child to which she gave birth was large and healthy.

Two or three months previous to her confinement, I was consulted by her family physician in reference to a sanguine discharge to which she had been subject for some time, and which I feared might depend on placenta prævia, but which I have no doubt now was consequent on carcinoma. I have since learned, upon enquiry, that as early as January, she complained of severe pains in the region of the uterus, and that in the very commencement of gestation she experienced unusual sensations that caused her for a long time to doubt whether she was pregnant.

After her confinement Mrs. ——— had an offensive discharge from the vagina. On expressing the opinion, when consulted in reference to it, that she was laboring under organic disease of the uterus, I was requested to visit her, October 5th, with a professional friend, and make an examination with the speculum.

The touch discovered an extensive schirrous enlargement of the neck of the uterus. We could not determine satisfactorily the extent of the ulceration by the speculum, because, before we could

make a proper inspection, we were compelled to remove the speculum, for she became so excessively alarmed and agitated that we feared an hysterical convulsion would have been induced.

As she was young and remarkably robust, we considered this was a case in which every possible effort should be made, although even under such favorable circumstances we had scarcely the slightest shadow of hope—favorable, I mean, in reference to her age, constitution and general health, but quite the contrary when viewed with respect to her recent gestation.

We put her on the internal use of proto-iodide of mercury, and chloride of soda as a vaginal injection, with an occasional resort to the sulphate of morphine, whenever pain might call it into requisition; she was however at this time, and for a considerable time after, comparatively free from suffering. We proposed to apply some cauterization, at another visit, when she might be sufficiently composed to bear its application, either the nitrate of silver or nitrate of mercury.

I was requested to visit her again, the 21st of the same month, sixteen days after my first visit. She had not yet lost her embonpoint, but the cancerous ulceration had made most frightful and destructive progress, having involved not only the posterior lip; but the posterior part of the cervix and body. It was now too late to think of any thing beyond palliative measures. We advised a lotion of the nitrate of silver, with the view of correcting the fetor and improving the condition of the ulcers, perhaps in some degree checking their course. After this she became subject to most alarming and exhausting hæmorrhages at each menstrual period. She now began to lose flesh and strength rapidly, and to suffer severe lancinating pains.

I visited her again the 6th of November. The disorganization was still more rapid, far exceeding anything I had ever before witnessed. We endeavored to support her strength by tonics, to alleviate her sufferings by opiates, to restrain the hæmorrhages by styptics and astringent lotions, and to correct the horrible fetor by the chloride of soda.

After the destruction of the posterior lip, posterior portion of the neck and body of the uterus, the ulceration extended through the vagina and rectum, allowing the fæces to pass from the latter through the former, and must have involved even the sacral plexus of nerves from the excruciating paroxysmal pains she suffered in that region.



I never saw her after the 23d December, but was informed by my friend that she continued to linger in the most painful and deplorable condition until the 25th of June, when death kindly released her from sufferings indescribably severe, almost beyond endurance.

It is impossible, from any thing we could learn of the history of this case, to determine how long the schirrus may have preceded the commencement of gestation: it is probable not very long, from the excellence of her general health and the fact that she did not complain of pain or any unusual sensation in the pelvis, until about the time she became pregnant.

This case is remarkable, from having occurred in so young, healthy and robust a subject, from the fact that the process of gestation was conducted most perfectly, notwithstanding the presence of schirrus certainly, and I think we may safely say cancerous ulceration, from the discharge and the characteristic fetor, parturition only being rendered somewhat more tedious and difficult. But if it is remarkable for the absence of any obvious effect of the cancer on the gestation, it is still more so for the very marked influence of the latter over the former. After delivery, the progress of the disease was extremely rapid, although in the early age, health and vigor of the patient, it might have been expected to have run a slower and longer course.

Mr. Lever considers twenty months to be the usual or average duration of uterine cancer. Dr. Ashwell concurs with him, if he refers, as he doubtless does, to the stage of ulceration. I would suppose, from my own comparatively limited observation, that the ulcerative stage generally lasts at least twenty months. In this case, there intervened only eleven months between her confinement and her death, although she possessed uncommon vigour of constitution and appeared to resist death much longer than any person could have supposed, considering the ravages of the disease and the intensity of her sufferings. I cannot speak positively with respect to the commencement of ulceration: I would infer, from the hæmorrhages during gestation, and the fœtid discharge during labour, that it existed previous to her confinement; but it certainly had not progressed far, even at my first visit, more than two months afterwards; it was so superficial that it was not evident to the touch, and, as I have remarked, in consequence of her extreme agitation and excitement, the examination by the speculum was not satisfactory. It is singular that ulceration had made comparatively so little progress, between

the time of her confinement and my first visit, and so much between my first and second visit. It is probable if I could have made a satisfactory examination at my first visit, a larger ulcerated surface would have been discovered; but after making all due allowance, I am confident, it was very limited compared with the progress made at my second visit.

If I had had an opportunity of examining this patient, during gestation, at the commencement of labour, and a month or six weeks after delivery, these details would have been more satisfactory; but I have related them as particularly as I could under the circumstances.

---

#### ARTICLE XIII.

*Gun-shot Wound—carrying away a portion of the right Clavicle, and passing through the summit of the Lung and Scapula: patient recovered.* By L. B. BEAL, M. D., of Richmond county, Ga.

On the 18th of April, 1846, R. D——, a youth of fourteen years, while on a hunting expedition, was shot by the accidental discharge of a comrade's gun, charged with eleven buck-shot, and others of a smaller size. I was immediately called to him in great urgency, as the wound he received was supposed to be mortal; being distant three miles I reached him in about an hour. As he was in the woods when the accident occurred, his friends were removing him home when I arrived. I observed an oozing of blood from the wounds through the temporary dressing which had been applied, and which I was unwilling to disturb for fear of hemorrhage. Arrived at his father's house, I proceeded to the examination of the injury sustained. The shot had entered through the skin, platysma myoides and cellular tissue, then the clavicle of the right side, a little nearer the acromion than its sternal extremity, passing obliquely backwards and downwards, coming out by making four openings in the skin covering the scapula, one of these being above and the other three below the spine of this bone. The opening of entry was an inch or more in diameter, cutting the clavicle completely into two fragments, which were more than an inch apart. In probing this wound, it commenced to bleed, and apprehending from this circumstance and the situation of the injury, that the subclavian artery or some of its branches might

require the ligature, I deemed it prudent to desist and ask for assistance and consultation. Dr. Paul F. Eve, Professor of Surgery, was sent for, and while waiting his arrival, cold astringents were applied to restrain the hemorrhage. But to my astonishment he now vomited a half pint of florid frothy blood, by hawking and coughing. I instantly tied up his arm and bled to 20 $\bar{3}$ ., and gave opium grs. ii., combined with sugar of lead grs. x. By these means, the hemoptysis was arrested.

When Dr. Eve arrived we went into a more thorough examination of the parts injured, and he removed, as well as I recollect, four fragments of bone, (clavicle,) and no shot were discovered. As the hemorrhage, both by the mouth and the wound had ceased, mild cold poultices to the wounds, cooling drinks, perfect quietude, &c., were strictly enjoined. I was to remain with the patient, and Dr. Eve was to return on the third day, Augusta being distant fifteen miles. The day after the accident, he took a dose of Epsom salts, and on the next day, his pulse was 110, 20 less than it was after the accident. There was not much inflammation or discharge from the wounds. We again proposed to continue the same mode of treatment, emollient poultices and chloride of soda injections to the opening made where the shot had entered as a mass, moderate diet and careful watching of the patient. Lime water—this with olive oil and charcoal poultices were also employed during the treatment. The sloughing process advanced regularly for six weeks, when after the removal of some speculæ of bone from the opening of entry, it finally healed up. The space between the ends of the clavicle is completely filled up, and no deformity of the shoulder-joint can be detected. One of the openings on the back, where the shot came out, suppurated. I opened it and extracted a flattened buck-shot, pieces of clothing, and a piece of paste-board, used for wadding the gun.

The patient is now in perfect health.

*Remarks by PAUL F. EVE, M. D.*—The restoration of this patient from so critical a wound, is mainly due to his own admirable fortitude, and the assiduous attention of his intelligent physician, and father. That the clavicle was cut in two, I know, since a portion of its whole circumference was removed. And that the lung was wounded, is also proven by the free and copious discharge of blood by the mouth. This young man was directly behind his companion, and within a few feet of him when the gun was fired. He was also lower down a hill, which will account for the direction of the wound.



## ARTICLE XIV.

*Amputation of the Fore-arm for injury sustained by machinery in motion—death.* By PAUL F. EVE, M. D., Professor of Surgery in the Medical College of Georgia.

Subscribing the aphorism of a German physician set forth in this Periodical last year—viz., that a Journal was needed by the profession; which would communicate only *unsuccessful and unfavorable cases*, I have had it in contemplation for some time to make my confessions on this subject. And as by the article on the Statistics of amputations, published in the August No., my success was made to appear to the best advantage, there is propriety in commencing my acknowledgments on this very point. Fortunately, however, my failures thus far have here been but few.

By reference to the paper alluded to, "Remarks on the Statistics of amputations," page 465, of the last volume of this Journal, it will be seen that up to that period I had amputated 51 times. This includes all the varieties of this operation. Since then I have removed 1 big toe, 1 leg, (making 15 consecutive successful amputations of the thigh and leg, including 1 partial of the foot,) and 1 of the fore-arm—total, 54 cases, of which 53 were successful, and 1 death. It is the details of this fatal case that are about to be submitted.

Stepney, a black boy, aged 13, and belonging to Dr. T., a highly respectable and intelligent physician of South Carolina, was brought to my Infirmary on the evening of the 15th January, by the owner, in his carriage. He had that morning been injured by the machinery of a cotton-gin, propelled by horse power. The right fore-arm was drawn into the wheel, and the momentum expended upon it and the hand. Its radial or external edge was extensively lacerated, the tendon of the long supinator was detached, and the radio-carpal articulation opened, making a compound dislocation at the wrist-joint. The integuments on the dorsum of the hand were also torn up from the metacarpo-phalangeal articulation of the fore-finger around to the pissiforme bone. The Doctor had dressed the wounds soon after the accident, and found it necessary to apply fourteen sutures. This account of the injury was only confirmed by an examination after the amputation, which revealed also a comminuted fracture of three bones of the carpal row—viz., the trapezium, magnum and unciforme.

As the wounds had been dressed with a view to union by adhesion, they were not disturbed until Monday the 18th, the fourth day since

the accident. The night previous, the patient had complained greatly, and had now considerable fever. Upon removing the dressing and all the sutures, no union had occurred, but a dirty muddy discharge flowed out, tinted yellowish about the joint by the sinovial fluid. Chloride of soda, compresses, a splint and light bandages were applied.

January 19th. Decided upon the propriety of amputation, and wrote the next day for his master to return and see him. From the great anxiety to save the limb, naturally enough to his owner, and from unavoidable circumstances, the consultation was not definite and decisive until the evening of the 21st. Amputation was then yielded to, chiefly upon the apprehension of tetanus, entertained by Drs. Dugas and Ford, but on my own part, from the nature and character of the wounds and the effect they had exerted upon the patient's system, independent of any accidental circumstance that might arise.

At 10, A. M., the 22d, exactly a week after the injury, the double flap amputation was performed before the class in the Medical College. The bones were divided about two inches below the elbow joint, 8 to 10 arteries were ligated, and after waiting an hour, the stump was dressed as usual. There was considerable tumefaction at the part amputated.

23d. The patient is doing pretty well. A call up the Rail-road prevented my seeing him until the morning of the 25th. Contrary to instructions, Stepney got up and walked into the garden on the 24th, the third day after the operation, and repeated the same before I saw him on the 25th. The weather during this whole time was very inclement. He had had some fever attended with nausea, and had vomited a live worm, *ascaris lumbricoides*. Took a dose of oil and turpentine, which acted well.

25th, fourth day, dressed the stump; found the bones well covered and soft parts united over them, but no union of the integuments.

26th. Has fever; gave 10 grs. of calomel in two doses, followed by magnesia and rhubarb. Bowels well operated upon.

27th. Dressed the stump, which looks badly. The edges are everted and much tumefied, though the bones are still perfectly covered. The ligatures (animal) are all dissolved. Applied chloride of soda and a flax-seed poultice.

28th. No improvement. The patient has little or no appetite.

29th. He is thought to be better this morning, and there appears

to be some little improvement in the stump. At 9. P. M. was suddenly called to Stepney. He had drank his tea and eaten a piece of bread, but soon became sick and vomited, complaining of pain in the epigastric region. He died in a few minutes after my reaching him.

*Post-mortem* eleven hours after death. Stomach and bowels empty, five or six live worms in the latter and one in the former. Stump, its edges everted, soft parts tumefied, bones completely covered by adhesion of deep seated muscles over them, with some infiltration of serum in the cellular tissue, but no suppuration. Arm quite natural.

No perforation of the intestines, &c., having been discovered, the immediate cause of sudden death in this case, is somewhat obscure. My opinion is, he died from the exhaustion of the general system, produced by the two weeks constant irritation of the wounds and the amputation, operating upon a constitution rather feeble originally. He had the appearance of a lad of 10 years, but was, as stated, 13.

---

## PART II.—REVIEWS AND EXTRACTS.

*On the Diagnosis of Urinary Changes.* By AUSTIN FLINT, M. D., Professor of Principles and Practice of Medicine and Clinical Medicine, Med. Dep. Buffalo University.--(Buffalo Med. Journ.)

In view of the importance with which late chemical and physiological researches have invested the disorders of the urinary secretion, it has occurred to us that a succinct account of the more prominent circumstances involved in their diagnosis would prove acceptable to our readers. It is convenient for the physician, whose attention must necessarily be directed almost simultaneously to the different departments of practical medicine, to have at hand a synopsis of facts appertaining to this, and other branches of his art, by means of which he can occasionally refresh his memory, and to which he can refer when cases occur requiring their application. It is to subserve these ends that we take the trouble of preparing the following brief summary of the chief circumstances to be borne in mind in interrogating the urine for pathological changes. The claims of urinary disorders, as constituting in themselves a class of interesting affections, but, still more, as furnishing important manifestations, or symptoms of diseases located elsewhere, or affecting the system at large, have assumed too important a character to admit of their being overlooked or neglected by practitioners who aim, we will not say to keep pace with, but to follow in the track of pathological progress. The time must soon arrive, when, to omit examination of the urine in the ma-



majority of diseases, will be as disreputable as to despise the stethoscope in affections of the lungs and heart. Prudence, therefore, as well as other considerations of a higher and more disinterested character, dictate to every practitioner the necessity of acquiring knowledge of urinary changes, and familiarity with the methods of distinguishing them, sufficient for ordinary practical purposes. This is by no means an intricate and difficult task. Doubtless a false impression on this point repels many from directing their attention to the subject. It is a current belief that to test the various alterations which the urine undergoes, requires minute acquaintance with the details of chemistry, and no small skill in analytical manipulations. This is an entirely erroneous idea. Very little attention and practice will enable the practitioner to determine all the more important facts involved in diagnosis; and the time and trouble which the necessary examinations will demand are but trifling obstacles.

In the following brief synopsis we shall include the rules and methods of analysis which are required to furnish, in most cases, all the information to be desired by the practitioner. The authorities consulted are Prout, Robert Willis, Christison, Bird and Simon. With this general acknowledgment we need not refer to them for the particular facts taken from them severally. The more important disorders of the urine, nosologically arranged as such, are as follows:—

1. Aqueous Urine, Hydruria, Diabetes insipidus, Diuresis.
2. Superabundance of Urea, Azoturia.
3. Undue diminution of Urea; Anazoturia.
4. Excess of Lithic Acid and the Lithates; Lithuria, Red Gravel.
5. Excess of the Phosphates, White Gravel.
6. Presence of Oxalic Acid.
7. Diabetes Mellitus or Melituria.
8. Albuminaria, or Bright's Disease.
9. Mucus, Pus, Blood, &c., in the Urine.

We will take up these several classes of changes in the foregoing order, and state briefly the means by which they are severally to be distinguished.

A. *Increase of the Aqueous portion of the Urine.*—This is hardly to be considered a disease. It occurs transiently after free indulgence in alcoholic or other beverages (*urina potus*), during mental excitement or anxiety, in some persons from intellectual activity, in hysteria, from a peculiar idiosyncrasy in which at the same time a constant craving for drinks is experienced. The chief advantage of recognizing it as a pathological condition is, that it may be distinguished from other affections of a much graver character, which are attended with an increased secretion of urine.

When the quantity of urine is increased, without an increase of the solid constituents, the specific gravity should be correspondingly low. The specific gravity is most readily determined by a hydrometer made for the purpose, called the *urinometer* or *gravimeter*. The quantity of urine passed in 24 hours is to be ascertained, and com-

pared with the average standard, which is from thirty to forty ounces. If the sp. grav. be lessened in proportion to the increase of the quantity, it is presumable that the excess is in the aqueous portion.

To obtain the exact relation of the solid ingredients, collectively, to the whole quantity of urine, the following method is to be pursued: A given quantity is to be carefully evaporated, and the solid residue, after being completely desiccated, accurately weighed. Then, by the arithmetic rule of proportion, we are able to arrive at the precise amount of ingredients in the whole quantity of urine. In order to spare this trouble, the ratio of solid and fluid matter to a given quantity of the whole fluid (1000 grs.) has been calculated for given numbers expressive of the specific gravity, and the results have been thrown into tables, so that having ascertained the specific gravity by the urinometer, on reference to the tables, we can in a moment determine the whole amount of solids contained in the quantity passed in 24 hours, with sufficient accuracy for most practical purposes.—[For the table, see R. Willis, on Urinary Diseases; Bird, on Urinary Deposits; Bell and Stokes' Practice.]

Diminution of the aqueous portion of the urine is to be determined conversely in the same manner. This, like the former, is seldom, if ever, a disease. It is present in febrile and inflammatory affections; and, within the limits of health, may be occasioned by increased transudation from the cutaneous surface, and various other circumstances. The specific gravity of healthy urine, it is to be recollected, is about 1,020.

B. *Superabundance of Urea*.—The density of the urine is increased in this disorder, provided there be not at the same time an excess of the aqueous portion. It frequently co-exists with diuresis, forming a species of *Diabetes insipidus*. Hence it is important to ascertain the whole quantity of urine passed in 24 hours in order to determine the amount of *absolute* increase of the urea. The *relative* excess of urea may be ascertained with sufficient accuracy for ordinary practical purposes in the following manner: A small quantity of urine is to be poured into a watch glass, and half or an equal quantity of nitric acid added, so that the latter will fall to the bottom of the glass; the glass is then to be allowed to float on cold water. If only the normal proportion of urea be present, no striking effect will be produced. If the urea exceed considerably the normal proportion, crystals of the nitrate of urea are shortly observable at the bottom of the glass; or the mixture may become more or less solidified. The degree of excess is to be estimated, in part, by the time occupied in the formation of crystals. This may vary from a few moments to several hours. Healthy urine does not yield crystals in this mode except it be concentrated by evaporation. To ascertain precisely the quantity of urea in a given quantity of urine, a more intricate, but not difficult process, is required. For this, Simon's Animal Chemistry may be consulted.

Urine holding an excess of urea is generally straw-colored or pale.

It may be brown like porter. It speedily gives off a strong ammoniacal odour, owing to the decomposition of the urea.

This form of disorder is found associated with emaciation and debility, which are otherwise unaccountable. Examination of the urine will therefore frequently throw light on cases which were before obscure.

*C Diminution of Urea.*—If the urea be diminished, the specific gravity will be correspondingly low, unless diuresis accompany it, which is not unusual. It is therefore, as in the former instance, important to take into consideration the whole quantity of urine passed in the 24 hours, so as to estimate the absolute as well as relative deficiency. The urine, under these circumstances, acquires on standing a putrid, sour odour compared to cabbage-water. The usual ammoniacal smell is deficient or absent, owing to the smaller quantity of urea to be converted by decomposition into ammonia.

The pathological relations and general symptoms of this form of disorder are but little known. It is doubtless connected with some fault in the processes of assimilation, (primary or secondary) by which the urea is formed.

The disorders relating both to the excess and deficiency of urea are of less frequent occurrence, and practical importance than those which are to follow.

*D. Excess of Lithic Acid and Lithates.*—It is still a question among chemical observers in what form or forms Lithic acid exists in the urine. The majority, however, adopt the opinion of Dr. Prout in opposition to that of Berzelius. Dr. Prout thinks that it does not exist in a free state, but in combination mostly with ammonia, forming the lithate of ammonia. It may exist in combination with soda. Lithic acid and the lithates (ammonia and soda) when present abnormally in the urine, are presented in the form of a sedimentary deposit. Lithic acid is much more rarely observed in an isolated sedimentary form, but it is occasionally presented. It is always in crystals, sometimes large enough to be discerned with the naked eye, but generally requiring the microscope. Their peculiar characters under the microscope are described and figured in the work of Golding Bird. In this synopsis we must omit microscopical appearances of these and other deposits, as they would occupy too much space. The reader is referred for facts relating to this very interesting and valuable department of examination of the urine to the work just referred to. Lithic acid crystals assume different colors between a crimson red and fawn color. They may be set free and studied with the microscope in healthy urine by adding nitric acid. The addition of nitric acid sometimes occasions a copious deposit, which, without care, may be confounded with albumen. The presence of lithic acid crystals does not necessarily denote an excess of this urinary principle; for if any acid be superabundant, (muriatic, sulphuric, lactic, &c.) it may combine with the ammonia already in combination with the lithic, and set the latter free. To determine in doubtful cases whether it be



absolutely in excess, the whole urine passed in 24 hours must be collected and measured; a definite quantity must then be tested quantitatively for the lithic acid which it contains. By the rule of proportion, the whole amount contained in the whole quantity is readily ascertained. If this exceed considerably the average healthy quantity, which is a fraction over 8 grs. in the 24 hours, it is in excess. For the details of the quantitative analysis, which is not difficult, see work of Bird, or Simon's Animal Chemistry.

The most common form in which it is in excess is in combination with ammonia or soda—constituting what is usually called the *Lithates*. These form a non-crystalized, amorphous, or pulverulent sediment. The sediments of the lithate of ammonia have different colors—red, pink, and sometimes, but rarely, nearly white. The red sediment is familiar as the lateritious or brick-dust deposit. The test of these is sufficiently simple. Urine holding the suspected deposit in a test-tube or common vial is to be held over a spirit lamp or near the fire. If on becoming warm the sediment dissolve and the urine be rendered transparent, it consists of the lithates. If, on the other hand, it is unaffected, or the urine be rendered turbid, the disorder is of a different character. The deposit of the lithates occurs transiently from indigestion, or a common cold. It characterizes the termination of fevers and inflammations, and sometimes continues through the course of fevers. It occurs in a marked degree in gout and rheumatism, and in some forms of dyspepsia. In general terms it denotes mal-assimilation, either primary or secondary, or both, but the specific aberrations upon which it depends are yet to be determined. The lithic acid crystals constitute the concretions called red gravel. They occur in the kidney, and passing into the bladder may constitute a nucleus for stone. The lithic acid diathesis, therefore, with reference to this possible result should be known and remedied.

**E. Excess of Phosphates.**—The saline constituents of the urine are of several kinds, but the phosphates predominate, and for most practical purposes, it is sufficient to include them under this generic term. The more important of the earthy salts are phosphate of ammonia and magnesia, called frequently the triple phosphate; the phosphate of lime; and the carbonate of lime. They are nearly insoluble, unless an acid be present. The ammonio—phosphate of soda is another triple salt which is soluble, and therefore not so easily determined to be in excess. The phosphates in excess (with exception of the salt last mentioned.) manifest themselves by a white sediment, which may from appearance alone be mistaken for the lithates, mucus, pus, or albumen. It is to be tested first by heat. Heat applied in the same way as when testing for the lithates, produces no change, or if any, it increases the deposit. Nitric acid is then to be added. (a few drops will suffice.) If the sediment consists of the phosphates, it will be found to dissolve, and render the urine clear. Urine holding the phosphates in excess is usually pale, frequently resembling whey, and sometimes milky in appearance.

In all other disorders of the urine it has an acid reaction upon litmus. In this disorder the acid reaction is faint, or it may be neutral, or it may be decidedly alkaline. Alkaline urine necessarily throws down phosphatic deposits, because the phosphates are insoluble if no acid be present. A white deposit occurring in urine presenting an alkaline reaction may therefore be known to consist of the phosphates. To test the acidity of the urine the practitioner should be provided with blue and red test paper.

This disorder is connected with some bad forms of dyspepsia. It generally denotes great loss of constitutional vigor, and the breaking up of the constitution. It is therefore an unfavorable sign. \* There are, however, striking exceptions to this remark. The phosphatic sediments are amorphous, with the exception of phosphate of ammonia and magnesia. This is presented in minute crystals, which frequently collect on the surface of the urine forming an iridescent scum. Crystals of this salt forming in the kidney constitute what is called white-gravel. Calculi with these crystals for nuclei are very rare. They generally proceed from crystals of lithic acid as nuclei, but the latter frequently increase in size from phosphatic accretion.

F. *Presence of Oxalic Acid.*—The foregoing disorders have related to principles which exist in the urine in a state of health; but oxalic acid is not present in healthy urine. Its existence in ever so small proportion is therefore a mark of disease. It is a rare disorder; but since the investigations of Golding Bird it has been found not to be so extremely infrequent as has been heretofore supposed. It does not usually form a deposit, and its presence is to be determined by the microscope. Its pathological relations are obscure. The oxalite of lime constitutes the rare form of calculus called mulberry calculus.

G. *Presence of Sugar in the Urine. Diabetes Mellitus.*—Sugar does not exist in healthy urine. Until lately it was supposed not to exist in the blood even of diabetic patients. Its presence under the latter circumstance is, however, now well ascertained. Diabetes may be suspected when the quantity is greatly increased, and when it has a high specific gravity. The density of diabetic urine is seldom under 1.025, and may be as high as, 1.050. It is usually of a pale color, and froths on agitation more than healthy urine.

There are numerous tests for sugar in the urine, but the two following will suffice for all practical purposes:

1st test. A few drops of the suspected urine are to be placed on a porcelain dish, and carefully evaporated. When dried add a few drops of dilute sulphuric acid, (one part of acid to six or eight of water) and heat gently for a few moments. If the urine contain sugar, the spot soon turns black, owing to the carbon of the sugar; otherwise it assumes an orange color. This is an easy and very delicate test.

2d test. Put two teaspoonfuls of yeast into a vial, and pour upon it three or four ounces of the suspected urine. Place the mixture in a warm place. If sugar be present fermentation will soon take place.

If sugar be not present it will remain unaffected. A good way to illustrate the significance of this test is to take three vials each containing the same quantity of yeast. Add to one vial the suspected urine; to another, water holding in solution a few grains of sugar; and to the third, urine not supposed to be diabetic. Place them all together in a warm place. The difference will show the value of the test. An acquaintance with these simple methods of determining the presence of sugar renders tasting quite an unnecessary sacrifice of inclination. To taste of a patient's urine is therefore to be regarded as an evidence of an unusual want of fastidiousness, or a confession of ignorance.

**II. Presence of Albumen. Bright's Disease.**—Albumen is not a principle of healthy urine. Its presence is therefore a sign of disorder. It is occasionally noticed in connection with a variety of diseases; when it is considerable in quantity, and persistent, however, it is a pretty certain criterion of granular degeneration of the kidneys, or Bright's disease. Under these circumstances it coexists with anasarca and other dropsical effusions; and may be associated with numerous other affections. The tests of its presence are heat and nitric acid. If a quantity of urine in a test tube or common vial be heated to near the boiling point, the albumen, if present, is coagulated and precipitated. A suspicion may possibly exist that the deposit thrown down in this way consists of the phosphates. To settle this point a little nitric acid should be added, which, if the phosphates are deposited, will cause them to dissolve; otherwise the deposit will remain. Nitric acid added at first will, also, coagulate and throw down the albumen. This, from appearances alone, may be confounded with deposit of lithic acid, which sometimes occurs on the addition of nitric acid. To obviate this mistake the urine should also be tested by heat; or the white deposit examined with the microscope, which, if it consists of lithic acid, will demonstrate its crystalized form. For all practical purposes it suffices to estimate the relative quantity of albumen by noting how high the deposit extends up the vial or test-tube, after being permitted to stand for several hours.

**I. Mucus, Pus and Blood in the Urine.**—The presence of blood, if in considerable quantity, is easily enough detected by the eye alone. If diffused through the urine in small quantity it is more difficult to be ascertained. The color of the urine is blood red. A white rag dipped in it is colored red. In very doubtful cases the microscope must be resorted to, when the appearance of the blood disks will settle the question.

It is sometimes useful to distinguish pus from mucus. Mucus generally falls to the bottom of the vessel, and when the urine has been gently poured away, remains with greater or less tenacity. If the urine be agitated with the mucus, the latter does not commingle, but appears in the form of long shreds or jagged portions. Pus, on the other hand, is capable of being readily mixed with the urine on



agitation; it does not form a viscid tenacious mass, and the supernatant urine cannot so readily be poured away from it. These characters will suffice whenever either exists in any considerable quantities. The microscope, in cases of a doubtful character, furnishes a ready test, the appearance of the pus globule being sufficiently characteristic.

The foregoing synopsis, it is believed contains the necessary rules and methods of testing urine, in so far as is requisite for the general practitioner to be acquainted with the subject. As we have said, our object in presenting them in this form is, that it may serve to refresh the memory, and for convenience of reference. If it should be made to appear that the subject is not a difficult one, but, on the contrary, only requires a little attention to be understood sufficiently for all practical purposes, the little trouble which this brief summary has cost us may answer another good end—viz., it may convince our readers that there is no good apology for neglecting to avail themselves of the knowledge to be derived from examinations of the urine.

---

*Remarks on Foreign Bodies found in the Sub-lingual region, and regarded as Salivary Calculi.* By Dr. STANSKI.—(Translated from the Archives Générales for October, 1846.)

The object of the article referred to in the above caption is to establish the fact that foreign bodies which occur in the neighborhood of the sub-lingual glands have been hitherto erroneously regarded as salivary calculi. The author proceeds to give the symptoms usually attributed to salivary concretions.

“The disease usually manifests itself slowly and insidiously, by a tumefaction more or less hard of the sub-maxillary gland, or rather of its surrounding tissue, beneath the angle of the lower jaw. This swelling is attended with pain more or less acute, which is increased by pressure, by the movements of the tongue, and by deglutition, and which sometimes may simulate angina. The patients have sometimes experienced a sense of numbness in the lower jaw and in the auricular and temporal regions of the affected side. These symptoms cease and reappear sometimes for months and even years. In a case seen by the writer, the patient, aged 36 years, had suffered since the 10th year of his age. In the case related by Sabatier, the patient was suddenly seized with pain during an effort of the voice whilst fencing.

“These temporary tumefactions are evidently produced by the irritation of the foreign body, and terminate in small abscesses beneath the tongue, which open and give issue to pus. But when, from any cause, these bodies are shocked, or become moveable, they irritate

the soft parts, and by approaching the buccal cavity, provoke an eliminatory inflammation and suppuration. It is then that the swelling and pain, and consequently the impediment to the movements of the tongue and of deglutition, become intense; the saliva becomes thick and viscid, the mouth unpleasant, the sublingual gland and the mucous membrane covering it swollen and œdematous. On pressing these parts, a tumor more or less voluminous is found beneath the tongue; within the soft parts is felt a body of stoney hardness, and if the inflammation has existed for some time, pus may be forced from an opening near the frenum of the tongue. Finally these symptoms cease only when the foreign body has been eliminated by the efforts of nature or removed by the surgeon.

“Before estimating the value of these symptoms, it should be observed that the presence of a calculus in the salivary passages must occasion their obstruction, their dilatation from accumulated saliva; in short the disease termed *Ranula*. In order to show the difference between the symptoms above related and those of *Ranula*, let us see what these are.

“*Ranula* appears in the form of a flattened, globular or oblong tumor, soft, compressible, slightly transparent, situated beneath the anterior portion of the tongue, near its frænum. It is at first small and indolent and impedes but slightly the motion of the tongue; but in time it grows, the impediment increases, and articulation becomes difficult. In a few months the tumor sometimes fills the buccal cavity, presses back and hides the tongue, and if not timely relieved may be attended with serious consequences.

“It must be seen that the symptoms of *Ranula* are essentially different from those of concretions. *Ranula* is unattended with the intense pain which accompanies these; its tumor is soft, indolent, transparent, and situated under the tongue, instead of beneath the angle of the jaw. Motion of the tongue is impeded by the volume of the sub-lingual tumor and not by the pain it occasions, as in concretions. It is difficult to admit the formation of such large calculi within canals almost capillary, without obstruction to the flow of the saliva and consequently the production of *Ranula*.

“Now in none of the subjoined cases were the patients affected with *Ranula*; and although J. L. Petit affirms having seen small calculi in one or two old and violent cases of *Ranula*, those concretions were sandy and friable and formed by the stagnation and thickening of the saliva; in most of the cases recorded, there is no mention made of calculi.

“The tumefaction of the region of or even of the sub-maxillary gland itself, is no evidence of the presence of calculi in the salivary gland, for a foreign body in the neighborhood might, by irritating the surrounding tissues, occasion the same state of things, as is seen in other parts of the body. We cannot admit the explanation offered by Sanatier, who says that the tumefaction is produced by the saliva, which not being able to escape, flows back to the gland, for, it might

be asked, why does this tumefaction not occur in Ranula, in which the saliva is certainly retained in the duct of Wharton and ought to flow back towards the gland? The intense pain experienced under the tongue and the consequent impediment to the motions of the tongue and especially of deglutition, would rather indicate the presence of these concretions between the muscles that concur in these functions, than in the excretory duct of the salivary gland—moreover those intense pains, felt only very late and when the foreign body is about to be eliminated, do not exist in Ranula, even when very large. The reason is that these pains are not occasioned by an accumulation of saliva in the duct, but by an inflammatory action in the soft parts preparatory to the elimination of the calculus.

“Those authors who have related cases in detail observe that pus flowed from these sublingual tumors, not by the duct of Wharton, but by an opening near it; nor do they allege that saliva flowed from them. In the case seen by the writer, the pus issued from an orifice near the frenum, a little in front of the orifice of the duct; no saliva flowed from the orifice of suppuration, as would have happened if the duct had been occupied by a foreign body.”

Dr. Stanski now furnishes the analyses of saliva made by Berzelius and Mitscherlich, to show that its constituents are not adapted to the formation of calculi. He then presents a series of cases illustrative of his position. We translate the one observed by himself, our limits not allowing us to lay them all before the reader, and this being deemed sufficient to convey his views.

“Joseph . . . a servant, aged 36 years, of a good constitution, lean and nervous, was subject from childhood to a swelling beneath the angle of the lower jaw; this swelling had continued some time, was tender on pressure, and occasioned during mastication and deglutition a sharp pain along the same side of the throat. These symptoms were always attributed to a tumefaction of the lymphatic glands; emollient applications would be made, and the disease would disappear to return again some time after. With these symptoms the patient would generally experience an uneasy sensation in the temple and cheek of the right side, and a numbness which he referred to the lower jaw of that side. On the 12th of July, 1846, being at the Hotel Lambert, the patient consulted me for a pain beneath the angle of the lower jaw, in the glands, which he stated were swollen. Upon examining him, I found neither swelling, redness, nor induration sufficient to account for the intensity of the pain he suffered. I therefore determined to look into his mouth for the cause, and accordingly, on elevating the tongue I found in the region of the sublingual gland a considerable induration and tumefaction; yet no pain was produced upon pressing it, nor had the patient even suspected its existence; he merely stated that his saliva was viscid and thick. Not being able to determine the nature of the disease, I



prescribed poultices and frictions with iodated ointment, intending to see the patient again, which I did a few days after. He then told me that he had suffered considerably beneath the tongue the two preceding nights, that deglutition was very painful, his saliva very thick, and the temple and right side of his face felt tender and benumbed. On examination I found a tumefaction and redness occupying the position of the sublingual gland, which upon pressure was quite painful and yielded pus from an opening on the side of the orifice of the duct of Wharton. I found in it also a body of stoney hardness. The patient suffered very much and incessantly begged to be relieved. Having become convinced that a foreign body, probably a salivary calculus, was the cause of all the symptoms, and that the patient could only be relieved by an operation, I made a longitudinal incision of two centimetres on the inner side of the sublingual gland and as near as possible to the tongue, and with dissecting forceps I removed a body, irregularly globular, hard, whitish, rough on most of its surface, and concave and smooth on one side. The patient having been fatigued, I made no further exploration on that day, but on the following, upon probing the wound, I found at its bottom a hard body, the extraction of which I made with some difficulty, as it was attached to the soft parts.

“During the last extraction, the wound filled with saliva and the patient was immediately relieved after the operation. This body was fifteen millimetres in length, was whitish, less rough than the former; from its shape it could be readily recognized as one of the small molar teeth.

“Had I not removed the second body, having evidently the form of a tooth, I would have examined with less attention the first, which had an irregular form, (its rough surface being of a brownish yellow,) and have mistaken it for a salivary calculus. But I had already, before extracting the second, observed as above stated, that the first presented on one side a concave and smooth surface, resembling the crown, whilst the opposite side presented a point resembling the root of a large molar tooth which had not yet passed out of the alveola. The extraction of the second tooth completely confirmed me in the opinion. I should add that these teeth touched each other by their crown, which seemed to be moulded on each other, that the patient has all his teeth in a good state, and that after the extraction I could without pain introduce into the wound a probe to the depth of ten or eleven centimetres, carrying it horizontally towards the pharynx. It may be remembered that I have said that the wound filled with saliva during the operation. This phenomenon, in another case, might have been regarded as a proof that the foreign body was lodged in the salivary duct, had not the true nature of the body been recognized. As to the abundant and sudden secretion of the saliva, this may be explained by the irritation of the glands incident to the operation, and perhaps also by the temporary stagnation in the duct, consequent upon compression, for as soon as the foreign body was

removed, the saliva flowed from the orifice of the duct and filled the wound which was then the most dependant point.

"The reader must have observed the remarkable fact, that of the two extracted teeth, the first was incrustated with an earthy substance, whilst the other was but slightly so. I think that this may be explained by the prolonged sojourn of this tooth in the midst of pus, whereas such was not the case with the second. This case proves clearly that these foreign bodies may be covered with calcareous concretions without being at all contained in a salivary passage."

The author concludes his interesting paper as follows:—

"Our object has been thus far to show that the foreign bodies removed spontaneously, or by art, from beneath the tongue, and which were regarded as salivary calculi, were not located within the salivary apparatus. From the case we have seen, and from the fact that it resembles in most respects those recorded by others, we believe that they were teeth more or less developed, whose surface being either corroded, worn smooth, or covered with incrustations, prevented their recognition. Let us see how these dental productions may occur in the soft parts of the mouth. Their presence under the tongue may be explained in two ways: they might be fœtal remains with which the individual was born, as has been observed in other parts of the body. This view is especially applicable to those cases in which the origin of the disease may be traced back to early childhood and in which several of such teeth have been removed, and more particularly if other fœtal remains existed. Meckel cites Dr. Schill, who saw in the course of three months three teeth developed under the tongue of a man 50 years of age. They were contained in a cyst.

"Another and a more plausible explanation is this: it is well known that there are individuals in whom teeth are formed beneath those ordinarily permanent, so as to constitute a third series; these most usually fail to be developed, and remain in the alveolæ. Now if these teeth do not force out those above them, they become as foreign bodies, and make their way through the tables of the maxillary bone, and even between the muscles, where they may remain encysted, and finally be eliminated as in the cases we have related. Maxillary bones have been seen containing such supernumerary molars, and others in which the walls were worn away or perforated by such teeth; the museum of the Faculty contains an inferior maxillary of this kind. As the sub-maxillary gland is on a line with the large molars, and as these are the teeth most subject to this peculiarity, it is not surprising that the tooth having passed out of the alveola, should irritate the gland and muscles, producing tumefaction of the former and pain during deglutition.

"When consulted for this affection, the physician should examine carefully the sub-maxillary region, and determine whether the tumefaction be scrofulous or whether it depends upon the presence of a foreign body. He should never omit to extend his researches be-

neath the tongue, for the foreign body might already be near the freum and still occasion tumefaction of the sub-maxillary glands. If the foreign body has advanced so far as to be covered only by a thin stratum of soft parts, he may either await its spontaneous elimination, which is however always very painful, or extract it by making an antero-posterior longitudinal incision as near the tongue as possible, so as to avoid injuring the salivary ducts.

---

*On the Effects of Mercury on the Young Subject.* By JOHN B. BECK, M. D., Prof. of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons, of New York. (From the *Annalist*.)

In some previous papers,\* I endeavored to point out the peculiarities attending the operation of Opium and Emetics, on the infant subject, as distinguished from the effects of these agents on the adult. I now propose to make some remarks on another article of even still greater importance, and that is *Mercury*. That Mercury is an agent of immense power, either for good or evil, upon the human constitution, cannot be questioned. While in many cases it is the means of saving life, in not a few it unquestionably destroys it. If this be so, it becomes a question of the deepest practical interest, to determine whether its action is modified in any way by the age of the patient, and particularly so, when it is recollected that it is given by too many physicians, even more freely, and may I not add indiscriminately, to the young subject than to the adult.

*The first and most striking peculiarity attending the action of mercury is that in young subjects, it does not produce salivation so readily as it does in adults.* Indeed under a certain age, it appears to be exceedingly difficult to excite salivation at all in them. On this point, besides our own experience, we have abundance of testimony. Dr. Clarke says, "under various circumstances he has prescribed mercury, in very large quantities, and in a great number of cases; and he never produced salivation, except in three instances, in any child under three years of age."† Dr. Warren, of Boston, observes, "that he has never known an infant to be salivated, notwithstanding he has given in some cases, large quantities with this view."‡ Mr. Colles, of Dublin, says, "no man in the present day requires to be told that mercury never does produce pytalism, or swelling and ulceration of gums in infants"§ Drs. Evanson and Maunsell speak still

---

\* New-York Journal of Medicine and the Collateral Sciences. Vol. 2, p. 1. Vol. 7, p. 153.

† Commentaries on some of the most important Diseases of Children. By John Clarke, M. D., p. 182.

‡ View of the Mercurial Practice in Febrile Diseases. By John Warren, M. D., p. 146.

§ Practical Observations on the Venereal Disease and on the use of Mercury. By Abraham Colles, M. D., p. 171. Amer. edition.



more strongly. They say, "mercury does not seem capable of salivating an infant. We have never seen it do so, nor are we aware of any such case being on record." "We have never succeeded in salivating a child under three years of age."<sup>\*</sup>

The same general fact seems to be applicable to the external use of mercury. Dr. Percival, of Manchester, remarks, that he "repeatedly observed that very large quantities of the Unguentum Cæruleum may be used in infancy and childhood, without affecting the gums, notwithstanding the predi-position to a flux of saliva, at a period of life incident to dentition."<sup>†</sup>

That salivation does not take place so readily in the infant as in the adult, would seem then to be well established. That it never can or does take place, as might be inferred from some of the preceding quotations, is by no means, however, true; and the statement, if implicitly relied on, is calculated to be the cause of much mischief. That very young subjects do sometimes become salivated, is unquestionable. One case, and only one, however, has occurred in my experience, in which a child of two years of age was salivated, and that by a very moderate quantity of calomel, viz., five grains, given in three portions, at intervals, within the space of about twelve hours. In about two days after, the gums became inflamed, the tongue swelled, several ulcers appeared in the month, and the flow of saliva was free; after continuing about three days in the same state, it gradually yielded, and disappeared without any further inconvenience. In this case every thing seemed favorable to the development of mercurial action. The child had been laboring under whooping cough for several weeks, and was a good deal reduced. It vomited freely with every paroxysm of coughing, and this no doubt aided in bringing on salivation, in a constitution peculiarly sensitive and evidently scrofulous. Nor is this a solitary case. Dr. Clarke, already quoted, admits that in three cases salivation was produced in children under three years of age, and similar cases have been observed by others. Dr. Blackall relates the case of a child, two years of age, who was salivated in consequence of taking two grains of calomel for several successive nights. The child was a poor scrofulous subject, and it sunk under the effects of the mercury.

This, then, is a remarkable peculiarity in the action of this agent upon the infant subject, and the observation of it has doubtless led to the belief, too prevalent among some physicians, that it may be given to them to almost any extent with perfect impunity; an error, which, if not in its immediate, yet certainly in its remote effects, has been the prolific source of more mischief, probably, than any of us are aware of.

*Although mercury so seldom salivates infants, yet, notwithstanding this, it cannot be doubted that it affects the system profoundly, and even more so proportionally than it does the adult. That it should do*

<sup>\*</sup> Treatise on the Management and Diseases of Children, p. 88.

<sup>†</sup> Essays, Medical and Philosophical. By Thos. Percival, M. D., vol. 2, p. 318.

so appears perfectly natural, when we reflect upon the mode of its operation on the human system. On this subject, I am aware that a great difference of opinion exists. By some, mercury is looked upon as a stimulant; while others view it as a sedative. A familiar acquaintance with its effects, however, will show, I think, that it may be the one or the other, according to circumstances—according to the dose in which it is given—the length of time it is continued, and more especially, the condition of the system at the time of using it. A single large dose of calomel will cause nausea and relaxation, and sometimes unpleasant prostration, while if it be given in smaller doses and repeated frequently, it will occasion irritation of the intestines, and general disturbance of the vascular and nervous systems. In the former case acting as a profound sedative, and in the latter as a stimulant, or rather irritant. That calomel given in large doses operates as a sedative, seems to be proved, not merely by the nausea and prostration which it frequently produces, but by other considerations. In dysentery, for example, in the adult, a dose of twenty grains of calomel will sometimes allay pain and irritation, with as much certainty as a dose of opium. For the purpose of testing the effects of calomel, some interesting experiments were made by Mr. Annesley, which would seem still further to show, that in large doses the action of this agent upon the mucous membrane of the stomach and intestines, is that of a sedative. He took three healthy dogs, and gave to one 3j. of calomel, to a second, ʒij., to a third, ʒiij. After this they were tied up in a room.

“The dog which took 3j. did not appear to feel any kind of sickness, till six or seven hours afterwards, when he vomited a little. He was lively the whole time, and ate his food well; had been purged two or three times; dejections of a black grey color.

The dog which took 3j. was likewise lively, and ate his food well, vomited two or three times, and was purged more than the other; he passed tape worms and the dejections were black.

The dog which took ʒiij. was heavy, and apparently uncomfortable the whole day, and did not vomit at all; he was purged, and passed a very long tape worm; dejections also black.”

Twenty-four hours after they had taken the calomel, the dogs were all hung, and five minutes after they were dead, they were examined, and the vascularity of the stomach was found to be in the inverse ratio of the calomel they had taken; i. e. in the dog which had taken ʒiij., the vascularity was the least, and so on. For the purpose of comparing this with the condition of the stomach of a dog which had taken no calomel at all, an examination of another dog was made; and here the stomach was found to be *more vascular* than in any of the others. From these experiments, Mr. Annesley drew the conclusion, that “the natural and healthy state of the stomach and intestinal canal is that of high vascularity, and that the operation of calomel in large doses, is directly the reverse of inflammatory.”\*

\* Transactions of the Med. and Physical Society of Calcutta. vol. 1, p. 211.

The foregoing considerations would seem to show that calomel in full doses is a local sedative, and in its general effects, is debilitating to the system at large. Hence its great utility and value as a remedy in many inflammatory diseases.

When, on the other hand, it is given in small and repeated doses, it acts not unfrequently as a local, as well as a general irritant, producing immoderate action of the bowels, and general irritation of the nervous and vascular systems. Now these, we know, are the effects observed continually in the adult, and it is but reasonable to suppose that all of them must, as a matter of course, be aggravated in the more delicate and sensitive system of the infant.

What shows incontestibly that the action of mercury is actually more energetic on the infant than the adult, is the fact, that when salivation does take place in the former, as it sometimes does, its effects are most disastrous. Sloughing of the gums and cheeks, general prostration and death are by no means uncommon occurrences. On this subject, Dr. Blackall justly remarks, "a general opinion prevails, that the constitutions of young subjects resist mercury. Its entrance into the system they certainly do resist, more than we could expect; but they are greatly overcome by salivations, and the possible occurrence of such accidents may well set us constantly on our guard."\* Dr. Ryan, too, says, "Ptyalism of infants is often followed by sloughing of the gums and cheeks; and this I have known to occur after the use of it in Hydrocephalus."†

Besides being more energetic in its action on the infant, mercury is also more uncertain. This must necessarily be the case, and for the same reasons that every other active agent is so. In the adult we know that mercury varies in its effects, according to the condition of the system, and the peculiarities of the patient's constitution. Thus some persons are salivated by the smallest quantity of this metal, while others resist the influence even of the largest quantities. In some, febrile action; in others, diarrhœa and exhaustion take place even from moderate doses. Hence it is, that every prudent physician, if unacquainted with the previous history of his patient, makes it a special subject of inquiry to ascertain whether he has ever taken mercury previously, and how it affects him. Now, in the young infant, of course, as we cannot so well have the benefit of this information, more uncertainty must necessarily attend its operation.

These, then, are the peculiarities attending the operation of mercury on young subjects, viz: that they are salivated with great difficulty, and that notwithstanding this, the effects of it are frequently more energetic and uncertain, than they are in the adult. And it is upon these as the basis, that I propose to make a few remarks, bearing upon the practical application of it in young subjects.

1. If salivation occurs so rarely in children under a certain age,

\* Observations on the Nature and Cure of Dropsies. By John Blackall, M. D. p. 126.

† Manual of Midwifery. By Michael Ryan, M. D. p. 477.



then it is evident that it can never be made a criterion by which to judge of its influence on their systems. To attempt, therefore, to produce this effect, as we do in adults, is manifestly improper. In cases where it is desirable to get the system under the full influence of the remedy, other modes must be resorted to for the purpose of judging to what extent the use of the article should be carried. Now this is by no means easy. Even in adults, where we have the benefit of salivation as a test, all practical physicians are aware how difficult it is frequently, to decide when it is proper to stop the use of the remedy. How much more so must the difficulty be increased in the young infant, where we are left without this guide. The only modes of judging, of course, are the character of the evacuations from the bowels, and the general impression made upon the disease for which it is administered. Both these are evidently, however, uncertain. It is to be feared, therefore, that for the want of a more certain guide than we at present possess, the use of this remedy is, in many cases, unnecessarily protracted to the great detriment of the little patient. From all this the conclusion is obvious, that in the use of this article in the young subject much greater caution is necessary than in the adult.

2. The fact that mercury may prostrate and destroy a young child, even though it does not cause salivation, it is to be feared is not sufficiently appreciated, at least by some. We have known calomel given without weight or measure, to a young child, and the reason assigned to justify it was, that it could do no harm, because it would not salivate. Now it appears to me that no opinion can be more unfounded, and no practice more mischievous. Although a single dose of calomel, even though large, may be well borne by children of ordinary strength of constitution, yet even this is not entirely safe in all cases. And when these doses are frequently repeated, particularly in delicate habits, the most serious consequences may result.

3. The use of mercury in young subjects as an alterative, should in all cases be conducted with great caution. There is no practice more common than that of continuing the use of this agent in small doses, for a considerable time, and certainly none which is more liable to abuse. Under the idea that the dose is so small and from no salivation appearing, we are apt to infer that even if the medicine is not doing any good, it is certainly not doing any harm. Any improvement too, which occurs during the use of the article, is sure to be attributed to the silent operation of it on the system. Now although this is not unfrequently the case, yet it is not invariably so; and every unobserving physician must have been aware of cases, in which, in this way, the article has been unnecessarily and injuriously continued. In bowel complaints, under the idea of altering the secretions, it has frequently, no doubt, helped to keep up the very intestinal irritation which it was given to correct. In other cases it has developed the latent tendency to other diseases, such as Scrofula, Phthisis Pulmonalis, etc. In adults we know this to be very often

the case. How much more likely is all this to happen in the young infant.

4. In the use of mercury in young children, great care should be exercised in ascertaining, as far as possible, their constitutional peculiarities. This, of course, is not in all cases easily to be done. A good deal, however, may be learned from an acquaintance with the tendencies of the parents. Wherever the parents show indications of scrofula, or where there is an hereditary predisposition to consumption, great caution ought to be exercised in the use of mercury in their offspring.

5. Mercury should be administered with great caution, in cases where a child has been sick for a considerable length of time, and when the strength of the child has been very much reduced. In this state of constitutional depression, a single cathartic dose of calomel sometimes proves fatal. We think that we have seen more than one case, in which a child has been irretrievably prostrated under these circumstances, under the false impression that calomel is an innocent purgative to a child.

6. The too common practice of giving calomel as an ordinary purge, on all occasions, is certainly unjustifiable. From the facility with which it may be given, it is unquestionably resorted to in a great number of cases, where it is certainly unnecessary, and in a great number where it positively does harm. The misfortune is, that its use is not limited to an occasional dose, but it is too often given in every slight indisposition of the child. Now, in this way, there can be no question that the use of it has laid the foundation for the ruin of the constitutions of thousands. It ought to be a rule laid down and rigidly followed, that in very young children, mercury ought never to be used as a cathartic, unless there is a special reason for resorting to it. In a great majority of cases, milder cathartics are decidedly to be preferred.

In concluding these observations, I trust it may not be supposed, that my intention has been to undervalue the importance of mercury as a remedy in the diseases of children. On the contrary, no one appreciates it more highly than myself. In many cases nothing can supply its place, and its judicious use has been, and is, the instrument of saving multitudes of lives. Notwithstanding, however, the many cautions to the contrary, it is to be feared that the use of it is still too general and indiscriminate. Indeed, the amount of it which is taken by the human race in one way or other, is incalculable. What is given by regular physicians, is perhaps the smallest quantity. If the public really knew how much of this article is swallowed unknown to themselves, in the shape of bilious pills, worm lozenges, and the white powders of the Homœopaths, they would be amazed at their credulity in deserting their old medical advisers, because they have the boldness to give them an occasional dose, and the honesty to tell them so.

sium. It consists of sublimed sulphur half an ounce, carbonate of potassa two drachms, lard two ounces; one half of this quantity is to be used daily.

*Zinci Præparata.*—The ointment of the oxide is useful in many eruptions; in some more benefit is derived from the lotion at the same preparation. The chloride of zinc is used as an escharotic in various strengths; it is made into a paste. (For mode of forming and using this paste, see abstract, Vol. I. p. 67.)

---

*Insensibility to pain from the inhalation of the vapour of pure Sulphuric Ether.*

It will be recollected by our readers that we early directed a letter to Boston, asking information on the subject of a new narcotising gas said to be discovered in that city. The reply was any thing but satisfactory; and allusions have since been made to a controversy between Drs. Jackson and Morton, and the secret attempted to be kept by a patent obtained by the latter from our government. We have been watching the matter with considerable interest, and by recent arrivals from Europe, we find the production of insensibility to surgical operations by the inhalation of pure Sulphuric Ether, has been received there with acclamation by the profession. In London, Paris, Edinburgh, Dublin, in fact, every where, both medical and commercial papers are filled with commendations on the subject.

Below we give details which will no doubt prove interesting to our subscribers. After reading Dr. Jackson's communication, sent by himself, we have performed some experiments, in which we are still engaged, and their result may be given under the head of Medical Intelligence, which please see.

The first article is a copy of a paper addressed to the American Academy of Arts and Sciences.

MR. PRESIDENT:—In reply to numerous inquiries which have been addressed to me from scientific gentlemen in various parts of the country, I beg leave to submit to the Academy, the following communication.

Although it will be impossible for me to condense all I may have to say upon the subject, within the limits of this paper, I shall endeavor to state those points, that are most interesting.

I have long been impressed with the importance of Medical Chemistry, and being both a Chemist and Physician, it is natural that I should seek among the resources of the Laboratory, the means of alleviating suffering. I was early impressed with the remarks of Davy



concerning the remedial agency of gaseous matters, and felt disappointed to find so few practical results growing out of the Medico-Chirurgical experiments. It seemed to me quite strange that no adequate researches had been made on the inhalation of vapors of such volatile and peculiar matters as the Ethers, and thus I was induced to institute the experiments which led to my discovery.

We are aware that Ether ranks in the Pharmaceutic books and Dispensatories, as a diffusible stimulant, and that its fumes or vapor produce intoxication of short duration; but it was unknown, until my experiments were performed, that it rendered the body insensible to pain, and threw the mind into a pleasant reverie or dream, so as to disregard the tortures of the knife and cautery. So far from recommending its inhalation, all the authorities strenuously advised against breathing it, as "fraught with danger." Perhaps there may be danger in the prolonged inhalation of the ordinary Ethers of Pharmacy, which are liable to be impure. We know that commercial Ethers may contain Sulphurous Acid Gas, Acetic, Formic, and Aldehydic Acids, the three latter being produced by absorption of Oxygen from the air.

The presence of a considerable proportion of alcohol in these Ethers causes them to produce mere intoxication followed by headache and prostration of nervous energy.

Although others may have experienced these effects, still the higher stage, viz: perfect insensibility and unconsciousness of pain was never reached, and the thin veil which concealed this discovery from the world had not been raised until my experiments were instituted.

A short description of the best processes of preparing Ether to produce the effects which I proposed to attain will not be irrelevant.

The basis of all the Ethers is a hypothetic radical, called Ethule, which is represented by the formula,  $C^4 H^5$  and symbol Ae. Pure Sulphuric Ether is regarded as an oxide of Ethule, and is represented by the formula  $C^4 H^5 O$ , its symbol is, therefore, Ae O. It is prepared by decomposing highly rectified Alcohol by means of Sulphuric Acid, or Oil of Vitriol. Five parts of Alcohol of 90 per cent. are mixed with 9 parts of Oil of Vitriol in a vessel of copper or iron, placed in cold water, so as to cool the mixture. The action of Sulphuric Acid on Alcohol is catalytic, bi-sulphate of Oxide of Ethule is formed, which by elevation of the temperature and brisk ebullition is decomposed, and the oxide of Ethule passes over in vapor; the Sulphuric Acid remaining with a portion of undecomposed Alcohol, the water which passes over in vapor no longer uniting with the Ether. Alcohol is repeatedly added to the Sulphuric Acid, which would decompose an indefinite quantity of it, were it not diluted by the water introduced; 10 per cent. of which is conveyed to it by common Alcohol.

The distilled liquid is next to be treated with an alcoholic solution of potash to neutralize the acids, and to render it slightly alkaline. It should then be redistilled in a water bath, and the operation is to

be arrested as soon as the Ether has attained a specific gravity of 0.72 at 80° F. The specific gravity may be still farther reduced by allowing it to stand for some days over dry chloride of Calcium and then re-distilling it in contact with that hygrometric substance. Its boiling point is at 96° F. It has a penetrating aromatic odour and is highly inflammable. It should not change the color of blue litmus paper.

The pure vapor of Ether as thus produced, will not support respiration, and by excluding air from the lungs would produce complete asphyxia. Therefore, I inspired it in such a manner, that there was mixed with the vapor a sufficient quantity of common air, to enable the lungs to perform their usual functions, but slightly disturbed by the Etherial vapor; and I would caution all who may administer it in future, carefully to fulfil this important condition so essential to success. In cases where alarming symptoms of asphyxia may occur from the accidents of improper administration, or from impurities of the Ether employed, and in those persons of high nervous susceptibility, or of determination of blood to the brain and pulmonary diseases, (though in the latter cases it may have been improper to administer it,) I have prescribed the inhalation of pure Oxygen Gas, which, acting on the blood, immediately renders it arterial, and this gas should be kept in readiness to meet any such emergency. It may be preserved in a gasometer, and be drawn off in a large India rubber bag for use at any moment. The administration of the Ether with all the above-mentioned precautions, will produce the kind of insensibility required. Its production is immediate, of short duration, and the effect passes off in a very short time.

In my first successful experiment the conditions as stated above were fulfilled, though the mode of administration was of the simplest kind, it is true, but yet efficient. A folded cloth saturated with the highly rectified Ether was placed over the mouth, the air being drawn freely through it, and the inhalation was continued till I lost all power over myself and sank back in my chair in a state of peculiar sleep or reverie. I experienced at first a sense of coolness, then of exhilaration and warmth followed by loss of consciousness. But it was not until a subsequent trial that I became aware that this loss of consciousness was accompanied by insensibility to pain; and a severe bronchial irritation produced by the inspiration of a large quantity of Chlorine gas was for the moment relieved, and the peculiar distress occasioned by that gas was not felt, as long as I was under the influence of Ether, though as that passed off it returned. I had several times occasion to mention these facts to my friends, and it is now a year since I urgently advised Mr. J. Peabody, who was associated with me as a pupil in Chemistry, to inhale the Ether vapor as a means of preventing pain, which would arise from the extraction of two of his teeth. He consented to try the experiment, and was preparing some Ether for the purpose, but on consulting the works, in which the effects of Ether are mentioned, he found all the authorities arrayed in opposition to my views, and that they warned against its

inhalation, as I have before stated, and he therefore did not complete the experiment.

About the last of September, or early in October last, I communicated my discovery to Dr. W. T. G. Morton, an enterprising and skillful dentist of this city, whom I occasionally advised, and who called at my Laboratory to borrow an India rubber bag, which he said he intended to fill with atmospheric air, and to cause a refractory patient to breathe it, hoping to act on her imagination, and induce her to allow him to extract a tooth. I dissuaded him from this attempt, and explained to him that I had discovered a process by which real insensibility to pain might be produced. I showed him Sulphuric Ether, and described the method of administering it, and also its effects on the system, assuring him, that if my directions were carefully followed no danger would ensue. I advised him to try its effects on himself, in order that he might better understand its mode of operation. He followed my instructions and was successful in the first trials, in the extraction of teeth unattended with pain, the results proving exactly as I had predicted. I also furnished him with a large glass flask with a bent glass tube as an extempore inhaling apparatus. I then proposed to him the trial of the Ether in a surgical operation at the Massachusetts General Hospital, where it was administered by Dr. Morton, and it proved successful: but some persons who witnessed the first operation doubted the entire freedom from pain, since the patient said "he felt a scraping." I was therefore desirous of testing it in a capital operation, the severity of the shock being the best test with regard to the degree of insensibility. Dr. J. C. Warren politely consented to have the trial made, and its results proved entirely satisfactory, an amputation having been performed under the influence of Etherial vapor without giving any pain to the patient. Drs. J. C. Warren, Hayward, Townsend and J. M. Warren performed the first successful operations that are recorded. Since then the most eminent surgeons in Europe and others in this country have confirmed by numerous trials the reality of the discovery. Occasional failures were to be expected, but they mostly have arisen from imperfect modes of administration, though some may be attributed to idiosyncrasies. Medical, as well as surgical science will probably derive advantage from this new practice. It may be worthy of trial in Tetanus and other spasmodic diseases. Intermittent headache, I believe, already to have been relieved by it, and the chills of intermittent fever may possibly be broken. The relaxation of the muscles effected by free inhalation of Ether vapor may enable the surgeon to reduce dislocations, and dispense with the powerful force of pullies and other violent means of extension. Already it has found its way into the Royal Veterinary Colleges of Alfort in France, and Camden in England, where severe operations have been performed on horses, sheep, and dogs without the manifestation of any pain or struggles in these animals. Even division of nerves has been performed on a horse, to which the Ether had been administered, and although the animal was



in no way restrained, not a struggle was made, or any sign of pain perceived. This precludes the idea of the effect being due to the imagination.

How far this new practice may extend is yet unknown, but there cannot be any reason to believe that the limits of its applications have been conceived.

CHARLES T. JACKSON.

Another experiment with the inhalation of Ether was made in the Royal Infirmary yesterday, by Professor Miller, and proved eminently successful.

The patient was a middle-aged Irishman—a “navvy.”—who had sustained compound fracture of the leg nine weeks before. The fracture had not united, in consequence of the presence of a dead piece of bone, and it became necessary to remove this by a painful operation. The patient was seated on a table, and the inhalation was applied by means of a very beautiful yet simple apparatus, made by Squire, of London, and which, we understand, had been sent to Professor Miller by Mr. Liston—a very suitable gift, under present circumstances, from that eminent surgeon to his old pupil. At first little effect was produced, but after some minutes the patient fell backwards, as if in a swoon. The operator was then about to proceed; but the man immediately objected, saying that he was not asleep, and that he trusted nothing would be done till he was asleep. For full 20 minutes more the inhalation went on; the man confused and talkative, but wide awake, and occasionally expressing very emphatically his conviction that ‘it would not do.’ At length, however, while in this wakeful state, the operation was begun. Incisions were made on the shin, and flaps were dissected off so as to expose the bone beneath. A portion of this was sawn and clipped through, and then the dead bone was removed. Only during the clipping of the bone with strong straining pliers did any sign of feeling escape from the patient, who was busy inhaling all the while, and now and then protesting that ‘it wouldn’t do.’ The operation occupied about 10 minutes, and, from the highly sensitive nature of the parts implicated, must have been attended with excruciating suffering under ordinary circumstances. After it was over, the professor said to the patient, ‘I suppose you won’t let me operate to-day.’ ‘Certainly not,’ said the patient; ‘it won’t do; I must be asleep. The thing hasn’t succeeded with me, and I am sure it can’t succeed with any one else, for I did everything I could to get asleep for my own sake, and I’d do anything to please you.’ You won’t even let me make a cut into the leg?’ ‘No; I must be asleep; we can try it another time.’ This plain proof of his utter unconsciousness of the operation having been performed was acknowledged by the spectators in a hearty round of applause. The patient then sat up, and seeing the wound, burst into an immoderate fit of laughter, saying, ‘No doubt there’s blood, or something very like it; but I haven’t felt a single thing done to my leg. That *bates* the globe;’ and, on being asked

decidedly as to his having 'felt any thing,' he repeatedly answered, 'Not a ha'porth.' He got into amazing spirits, and refused to leave the table until he had told 'all about the toldrums of the business.' And then, with the manner of a tipsy man, and very happy, he kept surgeons and students in a roar of laughter for some minutes with a narrative of his condition during the inhalation, which, Irish-like, seemed to have been a strange medley of imaginary fights and 'killings' going on around him, but wholly irrespective of his own leg and the operation. On being carried out, he declared triumphantly, 'This is the very best thing that has ever happened in the three kingdoms.' The professor stated that he considered this case quite conclusive as to the powers of the ether, because there was no more painful operation in all surgery, and because the patient, having been avowedly a hard and habitual drinker of spirits, was one of those persons who are least susceptible of the ether's influence. The whole proceedings seemed to give the greatest satisfaction to the medical and surgical officers of the institution, and to a large assemblage of interested spectators. Perhaps the most remarkable thing in such a strange tale is, the circumstance of a man being so wide awake and talkative, while all the while quite insensible to the cutting of his limb."

In the last No. of the Dublin Quarterly Journal of Medical Science, we find the following notice of Sulphuric Ether, by the Editor:—

*The Employment of the Vapour of Sulphuric Ether, as a Means of rendering Surgical Operations painless.*—Since the publication of our last number, a most important and valuable discovery has been made, in using the vapour of Sulphuric Ether for the purpose of rendering patients insensible to pain during surgical operations. All the professional journals, and the public press, have teemed with instances in which this great discovery has been tested and applied at most of the large hospitals in Great Britain and Ireland; and although the final conclusion to which the profession will come, as to the precise value of this discovery, the cases to which it is applicable, the constitutions over which it exerts its peculiar influence, the precise mode of administering it, and the exact amount of narcotism or intoxication which it is necessary to produce, cannot yet be stated, still we think the following facts and conclusions may be drawn from the experiments which have as yet been instituted.

I. The stupifying effects produced by the inhalation of the vapour of sulphuric ether appear to have been known to chemists for some years past, and to have been occasionally exhibited at chemical lectures. Its therapeutic agency in relieving pain was also proved more than twelve months ago. M. Ducros, at a meeting of the Académie des Sciences de France, on the 16th of March last, pre-

sented a memoir on the effects which sulphuric ether produces on man and some of the lower animals: his mode of applying it was by rubbing the palate, fauces, and interior of the mouth with the fluid, but, no doubt, the effects were produced by inhalation of the vapour. M. Ducros described with great accuracy the sporic and anodyne effects of the ether; drew attention to the advantages which might be derived from it in a therapeutic point of view, and pointed out to the Academy the best means of removing the narcotizing influence, which sometimes remains longer than is desirable. This antidote is opium and its preparations. (? How administered.)

II. Doctor Morton, a dental surgeon at Boston, appears to have been the first to make use of this agent as a means of relieving pain during surgical operations, and he soon acquired great and just celebrity in that city, by extracting teeth without the patients, who had previously inhaled the ether, being conscious of the operation. In October last it was applied in the General Hospital, at Boston, with the happiest results; Dr. Morton administering the ether, and Dr. Warren performing the operation. Upon the 3d of November, Dr. H. J. Bigelow read an account of this discovery (which had by that time been tested by many experiments) before the American Academy of Arts and Sciences. This account, and several private letters, having communicated the facts to several persons in Great Britain, it was taken up very warmly in these countries, and the results are already before the public; several capital operations have been so performed by the surgeons of this city; and there has been a public exhibition of its effects at a meeting of the Surgical Society. This discovery has been claimed by R. H. Collier, M. D., but the most which his claim amounts to is that of having published, in 1843, an account of the unconsciousness which may be produced by the inhalation of ether; but this, as we already stated, was long since known: its application to surgical operations is undoubtedly due to the American dentist, who, with Dr. Jackson, has, we understand, taken out a patent for its discovery.

III. The mode of application consists in the patient's inspiring the vapour by the mouth, while the nostrils are closed and expiring into the surrounding atmosphere; or inhaling through the nose, and expiring through the mouth, as practised at some of the Parisian hospitals. To effect this, various ingenious contrivances have been invented, which have been described and figured by most of our contemporaries.

IV. On commencing to respire it, the patient generally coughs, and feels at first considerable difficulty in continuing the inhalation, but after half a minute or so becomes more reconciled to it. Immediately before narcotism or insensibility takes place, there is often some struggle, and the application has to be continued by force. Its effects are various, and are very likely influenced by the peculiarity of constitution in different individuals, in some, producing decided narcotism (as it has been termed) in two minutes from the commencement of the inhalation, and causing insensibility for about the



same period of time, from which state the person quietly awakes as if recovering from an ordinary faint, and leaving no other ill effects than slight giddiness and headach, which go off in a couple of hours. During this process the following phenomena occur:—At first the face becomes flushed, the vessels of the head swollen and turgid, and the pulse accelerated, as the narcotism proceeds, and immediately after the person becomes unconscious to every thing but sound, and insensible to pain; the pulse diminishes in frequency, intermits with irregular pauses, and becomes much slower than it was prior to the commencement of the inhalation; the action of the heart is at the same time laboured, and in some cases irregular; the voluntary muscles of the body relax as in sleep; the face then becomes pale and clammy, and the breathing more or less stertorous. At the commencement of the insensibility the eye-balls are spasmodically affected, and in some cases roll in a remarkable manner. As the insensibility proceeds the pupils are dilated and turned upwards.

What would a physiologist, or practical physician, pronounce such a train of symptoms to arise from? By what term could he designate them? Hysteria, syncope, intoxication, asphyxia, or apoplexy?

In other cases it requires to be inhaled for a quarter of an hour before producing its effects. Again, there are persons over whom it exercises no influence whatever.

In a few cases that we have heard of, both here and in Paris, it does not appear to have produced unconsciousness, or any of the effects just described, but it rendered the patient quite insensible to pain. This is the most useful effect we have yet heard of; and if it should be discovered by what means this result may be brought about, then, indeed, it will prove one of the greatest blessings conferred on suffering humanity.

Some persons describe their feelings while under its influence as of a most pleasing description, having had pleasant dreams during their state of insensibility. Others, again, say they were conscious of all that was going forward, though they felt no inconvenience from the operation to which they were submitted; almost all say that they were conscious of sound, though unable to distinguish conversation, &c.

In other instances, however, persons do not recover from their insensibility, in the quiet easy manner we have described; a violent struggle takes place, and even a slight convulsion occurs, and movements of the body, quite involuntary, continue for some minutes after. Again, although the effects may in some constitutions wear off within an hour or two, as already mentioned, in others they are much more violent and of far longer duration, consisting in great prostration of strength, irregular action of the heart, great restlessness and anxiety, headach, sickness of stomach, depression of spirits, and (as occurred in one case) even convulsions; in fact, all the phenomena which some constitutions evince from any great nervous

shock, and particularly from an over-dose of intoxicating fluid. It is stated that the blood drawn during the state of insensibility is darker than natural,

In a third class of persons a totally different but not less formidable exhibition of morbid symptoms occur, best described as the incoherent madness of inebriety; the eyes roll, the passions are aroused, and a state little short of frenzy ensues. What proportion the latter class of patients bear to the first remains yet to be decided; and by what test we can discover beforehand (except by experiment) what the probable effects of inhalation will be, has yet to be stated. But then it must be acknowledged that several other medicines produce in some individuals effects just as extraordinary.

Independent, however, of all idiosyncracies, the surgeon is daily required to perform painful and dangerous operations, not only when the suddenness of the shock recently received is such as to preclude the use of a remedy so overpowering, but also when the condition of the constitution has been, by protracted disease, reduced to a state that would render the exhibition of this substance, should it prove deleterious, highly hazardous.

V. Supposing the mildest case, in which the effects are total insensibility for two or even three minutes, with quiet, easy return of animation, what is the benefit, as far as we yet know, which this discovery has conferred on mankind, and what facilities does it afford the operative surgeon, and to what operations is it applicable?

In capital operations, such as the removal of limbs, lithotomy, and all such operations as can be performed within a minute or two by the great manual dexterity of the surgeon, and particularly tooth-drawing, &c., &c., it appears to be of the greatest value; it has been successfully employed in operations for strabismus, and may be useful in other operations (if they be worth the risk) on the eye-lids, &c., but in extraction of cataract,\* or other ophthalmic operations where the globe of the eye is concerned, we should fear that it will be highly hazardous. In any operation which may occupy a greater length of time than the ordinary duration of insensibility, it is less applicable, for the action of recovery, and the involuntary struggle which ensues, might prove very hazardous at perhaps the most critical moment; and few have yet been hardy enough to renew the inhalation so as to prolong insensibility beyond a few minutes. Moreover, cases have been recorded, in which the patient, awaking during the operation, suffered as usual.

To the timid, however, and to those also who would not otherwise submit to any operation, it may prove of very great value.

Finding the subject discussed in the public prints, we lately published some remarks upon it in one of our morning papers. These were offered not for the purpose of decrying this valuable means of

---

\* A case of extraction has just been mentioned in the *Lancet*, in which the vapour was used effectually; yet this in no wise alters our opinion on this subject.

relieving pain, and lessening the great nervous shock during severe operations,—in some of which, performed on a particular class of patients, and capable of being accomplished within a very short space of time, it is highly serviceable,—but in order, if possible, to prevent its indiscriminate use. It is possible that accidents may occur in the inhalation of ether, and when they do, the present rage for its application may receive a check. Its ultimate, perhaps persistent, consequences on the constitution have not yet been tested, as also its value in relieving pain and suffering induced by disease. It may also be found highly useful in the reduction of dislocations.

We have here endeavored to present our readers with a brief summary of what really is known upon the subject at present.

---

*On the Fallacies attending Physical Diagnosis in Diseases of the Chest.* By THOMAS ADDISON, M. D.—(Guy's Hospital Rep.)

1. It is well known that many persons while under examination entirely fail to perform the respiratory act efficiently either from nervousness, or from mistaking the manner of accomplishing it. This may lead to an erroneous belief that the respiratory murmur is deficient, or even absent, while the lungs are perfectly healthy.

This source of fallacy is avoided by desiring the patient to cough, and to inspire deeply, so as to cough a second time. This done on both sides of the chest, the actual state of either lung may be ascertained with tolerable precision.

2. Whatever lessens the freedom, mobility, or elasticity of the ribs, renders the sound on percussion more dull. Hence it is that in rickety persons, where deformity of the chest has taken place subsequent to birth, the signs furnished by percussion are often extremely unsatisfactory; and, indeed, under such circumstances, neither percussion, nor in many instances auscultation, can be much relied upon.

3. Some persons with actual deformity have naturally such fixedness of the ribs, that they at all times manifest very imperfect resonance, as well as considerable feebleness of the respiratory murmur.

4. The rigidity of the cartilages of the ribs in advanced life has a similar effect; and, moreover, often tends to throw obscurity over hypertrophy of the heart by preventing the usual heaving of the ribs at each systole of the hypertrophied organ.

5. When exploring the chest in a case of recent disease, we may be misled by the permanent effect of an ancient pleurisy.

6. When, as usually happens, rickety deformity of the chest consists in lateral flattening of the ribs, with projection of the sternum, the action of the heart is liable to beat with such violence, and over so diffused a space, as to lead to the unfounded apprehension of organic disease of the organ.

7. The dullness on percussion caused by pushing up of the dia-



phragm by an enlarged liver, or fluid in the peritoneum, is liable to be mistaken for dullness caused by fluid in the pleura.

8. Bronchitis is a frequent source of fallacy, it may greatly obscure pneumonia, phthisis, and pleurisy, as well as other chronic diseases of the organs.

9. When the bronchitic complication of phthisis is considerable we often fail to detect some or all of the physical signs of the latter such as dullness on percussion, tubercular respiration, and even bronchophony and pectoriloquy. This is more especially the case in the earlier stages.

10. Dullness of sound on percussion, tubular respiration, bronchophony, pectoriloquy, and gurgling, are not necessarily conclusive of phthisis. All these signs may result from changes induced by a former pleurisy, from pleuro-pneumonia, or whooping-cough, or even from recent pneumonia or pleurisy associated with considerable bronchitis.

11. When, in phthisis, the larynx is so involved as to impede the entrance of air and give rise to permanent sonorous râle in the tube, the reverberation of this râle through the entire chest is apt to lead to the erroneous suspicion of disease in the lungs.

12. Complete loss of voice from disease of the larynx almost completely nullifies the results of auscultation.

13. The existence of a cavity may be overlooked if the bronchial tubes leading into it are plugged with mucus.

In every case of suspected phthisis the patient should be made to breathe and cough with violence; this will dislodge mucosities and render the existence of a cavity perceptible.

14. A patient may have all the rational signs of incipient phthisis while auscultation does not reveal any change in the lungs.

Similar symptoms may arise from relaxed uvula, and in hysteria.

15. Dilated bronchial tubes surrounded by indurated pulmonary tissue, cannot be distinguished from phthisical lesion by auscultation alone, especially if situated in the apices of the lungs.

In such cases the diagnosis is chiefly formed by the history of the case.

16. Malignant disease of the lungs cannot be distinguished from other lesions by auscultation alone.

17. If acute pneumonia have proceeded to complete hepatization when we first examine the patient, the physical signs are frequently insufficient to distinguish it from tubercular consolidation, or ancient pulmonic induration. This is especially the case if the apex of the lung be the seat of the induration.

18. Pneumonia may occur without cough, and so closely resemble simple continued fever that both the stethoscopist and the non-stethoscopist are apt to be deceived.

In such a case the stethoscopist has infinitely the advantage, and will rarely fail to detect pneumonia by the physical signs.

19. When the anterior and inferior portion of the left lung is con-

solidated by pneumonia, it may not be detected by percussion on account of the proximity of a flatulent stomach. Under similar circumstances a marked amphoric respiration is produced, with metallic tinkling, leading to the erroneous conclusion that pneumo-thorax is present.

The respiration acquires its amphoric character by reverberating through the solid parts to the inflated stomach or bowels.

20. It cannot be determined by physical examination whether pneumonia have or have not supervened upon tubercles, although the prognosis in the two cases would be very different.

21. I doubt whether physical examination can in any instance determine with certainty, the existence of simple tubercles in the lungs.

22. When serous effusion is very considerable, giving rise to unequivocal bronchophony, tubular respiration, and want of resonance and vocal vibration, physical examination has repeatedly led to a mistaken belief that these signs resulted from pneumonic or other consolidation of the lung.

23. When a patient presents himself with febrile affection of any kind, we may, on examination, detect dullness or percussion, tubular respiration, bronchophony, and a râle not distinguishable from the submucous crepitation commonly observed in pneumonic hepatization; and yet physical examination should not enable us to determine whether the chest affection be recent or of ancient date. When a portion of lung has been compressed by pleuritic effusion, and has been prevented from expanding again by adhesions, the physical signs may remain permanently, and be found to resemble precisely those which result from recent pleuro-pneumonia.

24. Experience leads me to the conclusion that pleuritic friction-sound cannot in all cases be distinguished from the rubbing produced between the inflamed peritoneal surfaces of the liver and diaphragm; neither can the croaking sounds produced in the bronchi be always distinguished from the pleuritic rub.

25. A simple pericarditis is rarely attended with pain, and as the other symptoms of that disease are equivocal, the physical signs are chiefly to be relied upon in forming a diagnosis. Nevertheless, when effusion has taken place to a certain amount the friction-sound commonly disappears, and as auscultation fails to recognize the disease.

26. Enormous accumulations of fluid in the pericardium cannot always be distinguished from effusion into the cavity of the pleura.

27. When the pericardial friction-sound is single, auscultation may fail to distinguish it from a valvular murmur, especially if it be situated over the region of the valves.

28. The double pericardial friction-sound may be confounded with the see-saw murmur of imperfect aortic valves, and vice versa.

This question may be almost decided by the characters of the pulse alone.

29. A sound closely resembling a murmur appears sometimes to

be produced by the stroke of the heart against a portion of lung interposed between it and the parietes of the chest. Under such circumstances auscultation may lead to the erroneous conclusion that the heart is diseased.

This sound is most commonly heard at some point at the edge of the left lung, and resembles the *bruit de rape*. It may occasionally be made to disappear by a deep sustained inspiration. The author thinks it may be identical with the sound described by Dr. Latham as present in phthisis.

30. Auscultation fails to distinguish an aortic murmur depending on organic change from one which results from other causes; neither can it decide whether what has been called a mitral murmur is organic or functional.

31. In certain diseases of the heart it is difficult or impossible to localise the murmurs with accuracy, however pronounced they may be.

32. Auscultation cannot distinguish the murmur of an aneurismal artery from the murmur produced by external pressure upon the vessel.

33. Physical examination does not enable us to distinguish congenital malformation from disease of the heart or large vessels.

---

*Treatment of Urinary Diseases.* By JOHN ALDRIDGE, M. D.  
(Dublin Hospital Gazette.)

*Treatment of Diabetes Insipidus.*—This is the name given to a symptom of urinary disease, in which an excessively increased quantity of water is habitually secreted from the kidneys, without any alteration of the solid elements of the urine. The specific gravity of this liquid becomes consequently very much reduced. This symptom appears to depend on altered innervation, and it is best treated by the internal use of antispasmodics and mineral tonics, with the external employment of stimulating liniments to the spine.

*Treatment of Lithic Acid Deposits.*—These deposits are either crystalline or amorphous. When the urine for any length of time continues to deposit, after each emission, the rhombic prisms of lithic or uric acid, this circumstance is an evidence that the kidney is affected with gout: under such circumstances the immediate danger is the formation of a calculus; and to obviate this it is desirable to exhibit either bicarbonate of soda or potash, in doses of ten grains or a scruple dissolved in half a pint of water, three times a day, so as to render the urine neutral or alkaline: but, this effect being obtained, the practitioner ought to direct his efforts to subdue the gout which is the cause of the symptom. If the urine be albuminous or sanguinolent, and there is much pain in the loins, it shows the attack to be of an inflammatory character, and to require a treatment locally antiphlogistic; otherwise recourse may be had to colchicum, or whatever remedy the practitioner prefers in the treatment of podagra.



If the lithic acid deposit be amorphous, its precipitation may depend either upon an excessive secretion of the solid constituents of the urine, or upon a deficiency in the secretion of water. In the former case the specific gravity of the urine becomes normally increased in proportion to its quantity; and this symptom is usually dependent on rheumatism of the kidney. The treatment should, of course, be directed to the rheumatism, at the same time it is desirable to hold the excess of lithates in solution by means of alkalies. Iodide of potassium is a medicine that fulfils both indications, and, given in doses of five or ten grains, three times a day, will usually be found serviceable.

When the amorphous lithates become deposited from a deficiency of water, the quantity of urine will be ascertained, upon inquiry, to be less than usual. Sometimes, however, the patient is deceived at this point by the concentrated and stimulating secretion, demanding frequent evacuation: under all circumstances it is most desirable, for diagnosis, that the daily discharge of urine should be measured. Diminution of the watery part of the urine may be produced by irritation of the kidneys, either idiopathic or symptomatic; or it may be the result of a lesion of innervation; or it may be the consequence of a vicarious mattery secretion from some other organ. When the deposited lithates are of a brick-red colour, the scanty secretion of water which produces their subsidence is the effect of the first of these causes; in that case a fever, either essential or symptomatic, exists, and the remedies calculated to remove the fever are those fitted to increase the urinary secretion and diminish the lithic deposit. If the deposited lithates be pale or buff-coloured, the chances are that they are caused by a nervous diminution of the watery element, connected with that weakened action of the ganglionic nervous system to which the name of dyspepsia is given; if such be the case, the internal exhibition of a scruple of alum in half a pint of water three times a day will soon remove the tendency to lithic acid deposit. A pink colour of the sediment is usually found in connection with an imperfect discharge of the biliary functions.

*Treatment of Phosphatic Deposits.*—These deposits, when principally crystalline, generally depend upon the urine being deficient in acidity: in that case the treatment will be described under the head of alkaline urine. Sometimes, when the bladder has been long diseased, a copious deposit of amorphous phosphates subsides from the urine; it is always, under such circumstances, accompanied with pus; and the indications which are thus afforded for treatment I shall hereafter mention.

*Treatment indicated by weakly Acid, Neutral, or Alkaline Urine.*—If the urine be neutral or weakly acid, from a vice of secretion, it usually shows that the kidneys are inflamed. In acute nephritis the employment of local and general depletion, as well as the exhibition of emollients and contrastimulants, must be regulated by the severity of the disease and the state of the constitution, according to the

ordinary principles by which inflammations are combated. I am persuaded that I have seen much benefit from large (℥) doses of hydriodate of potash in this disease. In chronic nephritis you will find great benefit from local depletion and counter-irritation, especially from the establishment of setons in the neighborhood of the affected glands. In the renal complication of typhus, large blisters to the loins, and the internal administration of wine, are usually indicated: small doses of oil of turpentine will, in these cases, often increase the quantity and restore the acidity of the urine.

*Treatment of the Oxalate of Lime Deposits.*—Although there can be little doubt that oxalic acid is generated in the urine by the putrefactive decomposition, and often occurs subsequent to secretion in a manner totally independent of disease, yet it is also certain that this decomposition frequently results from an essential vice of secretion. The morbid conditions which give rise to this change are not yet known; but one thing is well ascertained, that in every instance of the kind there is frequent desire to pass water, pain in passing it, and that the secretion is commonly loaded with epithelium. These phenomena proclaim the existence of irritation of the mucous membrane. Sometimes the crystals of oxalate of lime, like those of uric acid, cohere in the calyces and infundibula, forming calculi, which produce paroxysms of nephritic colic by their descent into the bladder. In such cases inflammation of the lining membrane may be mechanically produced; but it is doubtful whether the symptoms of mucous irritation which usually accompany the oxalate of lime deposit are due to the irritating contact of the sharp crystals. Whatever is the cause of the mucous irritation, it constitutes the lesion which, in oxalate of lime diathesis, you are especially called on to remove; and its successful treatment requires no little delicacy in the application of therapeutical agents. Unlike acute mucous irritation, depletion and emollients will act in this irritation injuriously, if employed in the first instance; you must have recourse to tonics immediately, such as the mineral acids, vegetable bitter astringents, &c.; and, having employed those means for some time, you will then find the greatest benefit from alkalies largely diluted. It will be often necessary to alternate these methods of treatment for a considerable period, but you will generally find that ultimate benefit will be derived from steady persistence in their use. The form of tonic mixture which I usually employ in these case is the following:

R. Infusi cascarillæ . . . ℥vj.  
 Nitratis potassæ . . . 3j.  
 Acidi nitrici diluti . . . 3iss.  
 Tincturæ opii . . . 5j.

M. Sumat cochlearia quo ampla ter in die.

*Treatment of Diabetes Mellitus.*—I look on saccharine urine as depending on a modification of the epithelial secretion produced by an asthenic condition of the urinary conduits. If this be the case,

medicines calculated to exalt the tone of the secreting capillaries, are those best fitted to restore the natural function. Accordingly, experience tells us that the balsams, ammonia, strychnia, and other excitants, are the medicines found most beneficial when the perspiratory secretion is suppressed; when, on the contrary, the functions of the skin continue unimpaired, much benefit is often derived from the internal use of chalybeates, alum, sulphate of zinc, or other metallic astringents. The whole system commonly shares either directly or consecutively in the debilitated condition which exists in the capillaries of the conduits, and it is, therefore, most desirable to employ every dietetic means calculated to increase the patient's strength. It is well, therefore, to give a moderate proportion of animal food, porter, &c., as much as is consistent with a proper exercise of the digestive functions; but from the exclusive animal regimen recommended by some, I have seen decidedly injurious results, but never any lasting benefit.

*Treatment indicated by Purulent Deposits.*—In my lecture on the pathology of urinary diseases, have been described the different sources of pus in the urine; and in my lecture on the diagnosis of urinary diseases, I have mentioned the methods of distinguishing these pathological causes from each other. We have seen that the urinary mucous membranes pour out pus when in a state of asthenic inflammation, and this circumstance sufficiently indicates the appropriate treatment. Tonics are the medicines chiefly to be relied on in these cases; decoction of the leaves of *chimaphila corymbosa*, *diosma crenata*, or *arctostaphylos*, *uva ursi*, or the root of *cissampelos pareira*, combined with mineral acids, will usually be found serviceable; chalybeates are also often of efficacy in these cases.

*Treatment of Hæmaturia.*—The most efficacious treatment of essential hæmaturias consists in the exhibition of astringents, such as tannin, or styptics, such as oil of turpentine; the use of the latter is very apt, however, to convert the hæmaturia into a nephritis; but in this case the reaction of the urine with litmus paper affords a most accurate test for pointing out the critical time when you should stop the exhibition of the medicine and cup the loins.

---

*Statistics of Cases of Miasmatic Fever treated in 1846.* By GEORGE L. URSHUR, M. D., of Norfolk, Virginia.—(Medical Examiner and Record of Med. Science.)

During the past year, 165 cases of miasmatic fever came under my care. Of these, 83 were Intermittent, and 22 Remittent. Of the intermittent, 1 was quartan, 15 tertian, 62 quotidian, and 5 masked. Of the masked, one took the form of neuralgia, and four simulated hysteria.

The treatment chiefly employed was the sulphate of quinine, ad-



ministered in large doses, without regard to the stage of the disease. In one case—a quotidian—occurring in a youth aged 16, of sanguineous, excitable temperament, I administered 15 grains just as the cold stage was passing off. All the symptoms were ameliorated; the hot stage lasted but one hour, and the patient had no return of the disease.

In 25 cases, I gave 30 grains in five hours, during the height of the febrile stage. The pulse was *lessened in force and frequency* in every instance under this treatment, and the paroxysm cut short by the speedy appearance of perspiration. In only one of these cases was the remedy preceded by other treatment. The exception was the case of an exceedingly robust man, in whom there existed, even in his ordinary health, a strong tendency of blood to the head. I bled him to twenty ounces before administering the quinine. He returned to his work (that of a baker,) forty-eight hours afterwards, and had no return of the fever during the season. He told me that for several years past he had not escaped an attack of bilious fever in the autumn, and that he was usually kept in his bed by it for three weeks. Said that he had taken the quinine before, but not while the “fever was on.”

In one case, the patient was partially comatose during the first paroxysm. This condition was relieved, in a measure, by a cathartic of calomel and aloes. Three hours before the second chill was expected, I administered 25 grains of quinine, and followed this by 15 grains more two hours afterwards. The patient missed the paroxysm and went to work the next day.

In 14 cases there was a recurrence of the disease. The recurrence in ten of these, however, could be positively traced to a second exposure to the causes of the affection.

The masked forms of the disease yielded readily to the quinine treatment. One of the cases which simulated hysteria was remarkably severe in its character, the patient being seized every afternoon with violent convulsions, accompanied by flushed face and considerable excitement of the circulation. She was treated at first by active purgation, and vesicants to the nucha, with only slight abatement in the intensity of the paroxysm. The regularity with which the attacks came, coupled with the fact that the patient resided in a part of the city where intermittent fever was prevailing, suggested the employment of quinine. She commenced early in the morning with five grains every hour, and took thirty grains. The paroxysm was much milder in the evening, and did not recur at all on the next day. She remained well for seven days, when she was again attacked as in the first instance, and again relieved by the same treatment. She subsequently had a third attack which was cured in the same manner. Her catamenia had been interrupted for six months previous to her sickness, and did not return until six weeks after the last attack.

I was not called to a single case of remittent fever at the beginning of the disease. In one case the patient had been ill *eleven* days

without any treatment whatever; she was much emaciated, and had suffered from diarrhœa for six days. I gave her a table-spoonful of the following mixture every hour:

R. Quinæ Sulph. . . . . 3ss.  
 Morph. Sulph. . . . . gr. ss.  
 Aquæ . . . . . f. ʒij. M.

In the course of five or six hours she perspired freely, fell into a quiet sleep, and in two days after was entirely free from disease. This was the sole treatment of the case, except the tinct. hydrochlorid. ferri, which was given for ten days after convalescence was established.

The other cases were managed after the same manner—the large doses of quinine being preceded by a simple cathartic of jalap and bitartrate of potassa in those cases only where there was great torpor of the bowels.

Not one of the 105 cases died, and all together did not take a drachm of calomel, or other preparation of mercury.

I observed unpleasant symptoms in only three cases, where they seemed to be at all dependent upon the large doses of quinine.

1. A delicate, nervous female, aged 36, was ordered 5 grains every hour, for a second attack of quotidian intermittent. When she had taken 20 grains, she became suddenly nauseated and vomited up three mouthfuls of scarlet blood. This occurred in the morning, and the chill was expected late in the afternoon. The medicine was suspended immediately, and she missed the paroxysm, and recovered without any other untoward symptom. She was treated with quinine for the first attack and also for a third, without any such effect being produced. The hæmatemesis was not vicarious of the menstrual discharge, as the catamenia had not been interrupted.

2. In this case the quinine vomited the patient like full doses of tartar emetic. She took twenty grains in five grain doses in solution, combined with spt. æth. nit. There was no gastric derangement prior to the exhibition of the medicine.

3. In the third case the patient, a female aged 40, who had but recently recovered from a very severe attack of *lichen agrius*, was rendered deaf, or nearly so, for ten days, by taking forty grains of quinine in eight hours. The intermittent, a tertian, was permanently cured.

I was never deterred from giving the quinine by the existence of diarrhœa, irritability of the stomach, or headache, provided the case was urgent, and it was absolutely necessary to put an immediate stop to the paroxysm. In cases of great torpor of the bowels, if there was time to spare, I preferred to begin the treatment by purging freely, because the quinine is not readily absorbed if there is much constipation. Usually, however, the safer practice is to put an end to the paroxysms first, and afterwards attend to the local affections.

I have found great benefit from combining the sulphate of morphia with quinine, especially in those cases complicated with diarrhœa

and irritable stomach. I also gave in many cases where the skin was very dry and the thirst urgent, the *spt. æth. nit.* combined with a solution of quinine, with great benefit.

My experience in the treatment of miasmatic fever in 1846, leads me to the following conclusions:

1. In a large majority of cases, no matter of what type the fever is, the "preparatory treatment," so called, is worse than useless, causing a loss of time which is often fatal to the patient.

2. A large dose of quinine, (15 or 20 grains,) administered at once, produces a more certain and permanent curative impression upon the system, than small doses (1 or 2 grains) frequently repeated.

Quinine in *large* doses, when administered in the hot stage, so far from exciting the circulation, acts as a decided sedative upon it—the pulse in every instance lessening in force and frequency under its influence. The dogma, therefore, that "quinine in fever is poison," must be discarded.

4. In *uncomplicated* miasmatic fever, mercurials are not at all essential to a complete and permanent cure. They may sometimes be given with advantage in cases where cathartics are indicated at the onset of the disease.

*Observations on the Curability of Opacities of the Cornea.* By HENRY HOWARD, M. D., M. R. C. S. L., Surgeon of the Montreal Eye and Ear Institution.—(British American Jour. of Med. and Physical Science.)

• It will readily be allowed that our information on the therapeutics of the eye, is still in its infancy, and consequently that there is wide scope for investigation under this head. My attention was forcibly arrested by an article quoted from a Dublin Journal, which appeared in the June number of the *British American Journal of Medical and Physical Science*, headed "Prussic acid in opthalmic diseases."

Opacities of the Cornea and their removal, have engaged my attention for a considerable period; and I have for some time kept a record of such cases, with the results, as have been treated by myself. Dr. Jacob's name must ever secure respectful attention with deference to any of his promulgated opinions; yet, if we always deferred to authority, where would be the boasted progress of the nineteenth century. Ought we blindly to bow to authority, and not seek to extend the bounds of knowledge?

Before proceeding further, I would beg to state that I highly appreciate the honour and opportunity I enjoyed of acquiring the opthalmic art under Dr. Jacob's tuition, and that I now feel grateful to him for the instruction imparted; and although the statements which follow directly impugn his assertion, I appeal only to facts, at the same time sensible that without his previous advances this point



could not have been attained, viz. : the curability of opacities of the cornea.

Dr. Jacob, after alluding to the cases of opacity of the cornea, stated by Dr. Bigger to have been cured by prussic acid vapour, concludes by saying, "That the cures might be only apparent, and might perhaps with more justice be referred to the natural salutary processes of the animal economy, which in the course of time succeed to the formation of those opacities, whether it be the mere subsidence of inflammatory action, or the agency of the absorbents; but for my part, the conviction on my mind, for many years, has been, (and nothing that I have heard lately tends to shake it,) that however dense these opacities become, even were they as white as paper, they will be obliterated in time, unless the product of destructive ulceration in the cornea consequent on wounds or ulcers; unless in fact, they are actual cicatrices."

Cold comfort this to give to a poor fellow blind of both eyes from *nebulæ* or *leucomata*, that if he will only have patience, nature will cure him before he dies, or perhaps not; for, says Dr. Jacob, surgery can do nothing for him.

Now, from considerable experience, I assert that a majority of cases of opacity of the cornea are curable or susceptible of great amelioration, and even in many of those opacities caused by cicatrices, their extent may be diminished, and vision restored to a greater or less extent.

If a case of blindness from opacity of the cornea presents itself to me, of many months or years standing, and that under treatment the opacities are removed, and sight restored in from four to six weeks, have I not a right to conclude that the treatment operated the cure, if not, then no fact in therapeutics is sure: *a fortiori*, if many such cases present themselves with similar results, the inference must be irresistible.

I propose to give two cases severally of *albugo*, *leucoma*, and *nebula*, their treatment and results. During thirteen months, forty-eight cases of opacity of the cornea have been treated at the Montreal Eye and Ear Institution, of which twenty-three were *nebulous*. Of these, eighteen were cured and five relieved: of eighteen with *albugo*—twelve were cured and six relieved; of seven with *leucoma*—six were relieved, and one abandoned as incurable. In selecting the following cases, I wish it to be understood that, if desirable, I could furnish many more.

CASE 1. *Albugo*.—Mary Harrigan, æt. 30. wife of a labourer. April, 2, 1846, had had sore eyes for three years; for a year had merely distinguished the light, and the outline of large dark objects, and had not been able to go alone through the streets. She had an *albugo* on the right eye and three on the left, completely obstructing vision. Perfectly cured in six weeks. Treatment—fumigations with hydrocyanic acid every day for ten minutes; after the lapse of another ten minutes, put one drop of a solution of nitrate of silver, gr.

x. a ʒi. into the eyes. For first fortnight took a wine glass full of the following mixture every morning—

R Infusi Gentianæ, ʒviii.

Sulphatis Magnesiæ, ʒi.

Acid Sulph. Arom., 3ss. m.

CASE 2. *Albugo*.—Feb. 8, 1846.—Ann O'Berne, æt. 26, a servant, had been gradually losing the sight of the left eye for some time, but had lost it completely for the last eight months. Dr. —, to whom she had applied, told her nothing could be done. On examination, I found an albugo completely obstructing the pupil of the left eye, in fact, occupying the whole cornea. Cured in two months. Treatment as in preceding case.

CASE 3. *Leucoma*.—Dec. 26, 1846.—John Gillaland, æt. 23, a ploughman, had leucoma of both eyes, completely occupying the left cornea, and preventing all ingress of light. The lower third of the right cornea was imperfectly clear, allowing of sufficient light to pass to enable him to guide himself through the street. Sufficiently cured in three months to guide the plough, a very small spot only remaining on the right cornea, and that not over the axis of vision; a small round spot over the axis of vision on the left cornea was removed. Treatment—daily fumigation of the eyes with hydrocyanic acid, and the subsequent application of Janin's opthalmic ointment, and every ten days the application of the solid nitrate of silver to the cornea. Internally took gentian and salts.

CASE 4. Feb. 11, 1846.—David Wark, æt. 14, some time previously had received a severe blow on the left eye with a stick, which had ruptured the cornea horizontally, and in healing had left a cicatrix about three lines broad across the eye; to the outer side of the cornea the iris had prolapsed and become attached to the cicatrix. He saw only the upper and under part of each object. Dismissed in six weeks with the cicatrix reduced to a mere line, and, by his description, the vision as good as in the right. Treatment—daily fumigations with vapour of hydrocyanic acid, and a small portion of the following ointment put into the eyes each day—

R Ungt. Opthal. Jan.

→ Hyd. nit.

-- Cetacei aa ʒi. m.

CASE 5. *Nebula*.—June 11, 1846.—Robert Hughes, æt. 55, a veteran, was led to the Institution by his wife; the right eye was destroyed, and vision in the left was completely prevented by nebula, both the result of inflammation. He had just arrived from New York, where he had been under the surgical treatment of the most eminent practitioners in that city, and hitherto the case had only gone on from bad to worse. After two months' daily attendance, he was discharged with very fair vision, sufficient to enable him to transact his ordinary business. Before returning to Wales, his native country, he left a certificate with me (as a voluntary effusion of gratitude), stating the benefit he had received under my care.

The treatment consisted in daily fumigations with hydrocyanic acid,—a drop of 10 grain solution of nitrate of silver, and after insulating him, drawing electric sparks from the eye and surrounding orbit.

CASE 6. *Nebula*.—S. M., æt. 13, called on me, May 2, 1846, complaining of dimness of vision of right eye, which had existed since he had had the measles in infancy. Had been treated unsuccessfully in New York by several oculists. The whole cornea was obscured by nebula; was perfectly cured in six weeks. Treatment—daily fumigations with hydrocyanic acid, and application of 10 grain solution of nitrate of silver. During the treatment, he took a considerable amount of the ioduretted solution of the iodide of potassium.

*Note*.—Janin's ophthalmic ointment is made as follows:

℞ Bol. Armen.

Tutiæ Prep. aa ʒii.

Hyd. Precip. Alb. ʒi.

Axungiæ, ʒi. m.

---

#### BIBLIOGRAPHICAL NOTICES.

*Materia Medica and Therapeutics, including the Preparations of the Pharmacopœias of London, Edinburgh and Dublin, and (of the United States,) with many new Medicines.* By J. FORBES ROYLE, M. D., F. R. S., &c., &c., Prof. of Materia Medica and Therapeutics, King's College, London. Edited by JOSEPH CARSON, M. D., Prof. of Materia Medica in the Philadelphia College of Pharmacy, Member of the American Philosophical Society, etc., etc., with ninety-eight illustrations. Philadelphia: Lea & Blanchard, 1847. 1 vol. 8vo. pp. 689.

Prof. Royle stands deservedly high in the medical profession, and the foregoing work is not calculated in the least to detract from his reputation. He states that he was induced to undertake the work from the conviction that "the student of Materia Medica required something systematic to study, which brought up to the present time, should be sufficiently full for information, and yet as short and condensed as was compatible with the avoidance of being superficial." The author has successfully performed the task imposed upon himself, and has produced a full manual, containing notices of many new articles, which will prove of great utility particularly to the medical student. It contains numerous well executed illustrations which add much to its interest and value. Prof. Carson, the American editor, has added such matter in connexion with the Pharmacopœia and indigenous Materia Medica of the United States as adapts the work to the wants of the American student and practitioner.



---

*Life and Trial of Dr. Abner Baker, Jr. (a monomaniac.) who was executed October 3d, 1845, for the alledged murder of his brother-in-law, Daniel Bates, including letters, &c.* By C. W. CROZIER. Trial and Evidence by A. R. McKEE. Louisville, Ky. : Prentice & Weissinger, 1846. pp. 152.

We have perused the above pamphlet with considerable interest, and we fully concur with the medical gentlemen to whom all the testimony was submitted, in the opinion that mental derangement was as conclusively proven in this as in any case upon record, and that the execution of Dr. Baker, under all the circumstances, was a *judicial murder*. What motive could have influenced the Governor of Kentucky to withhold a pardon from this unfortunate man, when the testimony, and the opinions of so many eminent physicians and jurists, pronounced him to be insane, we cannot conceive.

---

### PART III.—MONTHLY PERISCOPE.

*Action of Sulphate of Quinine on the Spleen.*—Dr. Pagis, interne of the hospitals of Paris, having undertaken a series of experiments for the purpose of ascertaining the application of sulphate of quinine on the spleen, publishes in the "*Gazette des Hôpitaux*," the results of his researches.

On a middle-sized dog the spleen was uncovered by two incisions perpendicular to each other. The transverse diameter of the viscus measured twenty centimetres, and the longitudinal six. The jugular vein was opened, and twenty-three grammes of alcoolat of quinine were injected; instantaneously the spleen diminished in every direction, its surface became rough and wrinkled, and its diameters were reduced to 14 cent. by 5.

On another animal the experiments were repeated, with a view of comparing the results of several injections: with water they were negative, with alcohol the spleen was very slightly corrugated, but with the solution of quinine the viscus contracted instantaneously in the most evident manner.—[*Medical Times*.—*Med. News*.]

---

*Deglutition excited by dashing Cold Water on the Face.*—The following suggestion by Mr. Simpson, of Stamford, founded upon the invaluable principles of the excito-motory system, is worthy of more general application in cases in which the power of voluntary deglutition is lost. The suggestion is well illustrated in the subjoined case.

A poor man, who had attempted suicide, was sinking from the effects of loss of blood; his pulse was imperceptible, and the action of the heart could scarcely be felt. It being desirable to administer

stimulants, his mouth was filled with spirits and water, but the patient was unconscious, and therefore did not swallow. Cold water was dashed upon his face, for the purpose of making him swallow by exciting reflex action, when the contents of the mouth were instantly gulped down.—*London Lancet.*

*On the Formation of Fat in the Animal Body.*—The following fact, related by M. Koss, is valuable, when taken in conjunction with the recent discussions which have been held in relation to the formation of fat in the animal economy. A workman was killed on a railroad, just after partaking of a full meal, consisting entirely of bread and grapes. His body was subsequently examined. The process of chymification was found in full activity, and at those portions of the small intestines which the chyme had reached, the mucous membrane was found dotted with white points, which, on closer examination, were seen to depend on the presence of drops of oil in the epithelial cells surrounding the extremities of the villi. Here is an example of the abundant formation of fat from substances which, at the most, could contain but a very small quantity of fatty elements, being composed almost entirely of gluten, starch and sugar.—[*Lond. Med. Gaz.*, from *Encyclop. des Sc. Méd.*

*Phthisis—Cod-liver Oil in.*—The efficacy of the oil of the cod's liver in phthisis pulmonalis has recently been attested by several observers. Dr. Thompson, who is one of the physicians of the Hospital for Consumption and Diseases of the Chest, at Brompton, states that he has derived more benefit from it than any other medicine which he has tried. He has exhibited it in thirty-seven cases with the following results. In three cases it was found necessary to discontinue it, in consequence of the nausea which it occasioned; in twelve there was no perceptible effect; in ten the increase of strength, plumpness, and energy were remarkable. When benefit was derived it was generally to be observed within a fortnight.

Dr. Toogood, of Bridgewater, and M. Delstanche, have likewise spoken of its value.

Dr. Huss, of Stockholm, speaks favourably of moxas below the clavicles in the treatment of phthisis.—[*Ranking's Abst.*

*Treatment of Pruritus Ani et Vulvæ.*—M. Cazenave treats the above obstinate symptom by one or other of the following lotions:

- |                            |   |   |   |   |              |
|----------------------------|---|---|---|---|--------------|
| 1. Subcarbonate of potass, | - | - | - | - | 3ij-3iv.     |
| Distilled water,           | - | - | - | - | 3xvj.        |
| 2. Sulphuret of potass,    | - | - | - | - | 3j.          |
| Distilled water,           | - | - | - | - | 3x.          |
| 3. Cyanide of potassium,   | - | - | - | - | grs. ix.     |
| Distilled water,           | - | - | - | - | 3vij.        |
| 4. Bichloride of mercury,  | - | - | - | - | grs. iij-iv. |
| Distilled water,           | - | - | - | - | 3vij.        |

[*Ranking's Abstract.*

*Treatment of Ascarides.*—M. Schultz employs enemata of infusion of quassia with great success for the expulsion of ascarides—the strength employed is 3j to an ounce.—*Gaz. des Hôp.*

*Ferri Cyanuretum in the treatment of Ascarides of the Rectum.*—A correspondent, who does not wish his name given, he not now being engaged in the practice of medicine, writes to us to invite the attention of the medical profession “to the use of the Ferri Cyanuretum, or Prussian Blue of commerce, in the treatment of *ascarides* in the rectum.”

“From present observations,” he writes, “I am disposed to believe that upon a fair trial it will be found more effective in the treatment of the *inveterate* cases of the disease, than all other remedies.

“Commence with five grains of the Prussiate rubbed up in two ounces of rain water or mucilage of gum arabic, (the pure water is preferable, except in cases where much irritation of the mucous membrane exists;) throw this into the rectum, and retain it until the next regular defecation.

“Repeat this daily, gradually increasing the quantity of the Prussiate until perfect and permanent relief is afforded. I believe the greatest relief will be experienced after using it once or twice.”

[*American Journ. of Med. Science.*

*Hysteria.*—The following conclusions respecting the pathology and treatment of hysteria appear in a memoir offered by M. Gendrin (*Archives Gén.*, Sept. 1846.) to the Académie de Médecine:

1st. Hysteria is not universally characterized by convulsive paroxysms: it is a *continuous* malady, the symptoms of which are always to be recognized during the interval between the paroxysms, as well as in the fit.

2d. In all cases of hysteria, without exception, a general or partial anæsthesia exists. In the slighter degrees, the anæsthesia occupies only particular parts of the integuments; in the more aggravated forms the whole integument is implicated, as are also such portions of the mucous membranes as are amenable to examination.

3d. There is no accordance between the degree of anæsthesia and the severity of the hysterical paroxysm.

4th. The greater number of patients experience over a limited part of the body a degree of hyperæsthesia which is in many cases the immediate cause of the fit.

5th. Paralysis is a frequent hysterical symptom, and may be prolonged for an indefinite time. This paralysis is the source of many serious errors in diagnosis.

6th. It is a mistake to consider the sensation of a ball in the throat as a constant accompaniment of hysteria.

7th. All the marvels related of late days as the production of animal magnetism are witnessed in spontaneous hysteria: so the insensibility which will allow a painful operation to be performed may be seen in hysteria.



8th. Of all medicinal agents there are none which is so efficacious as opium in large doses.—[*Ranking's Abstract.*]

*Tincture of Cantharides in Bright's Disease.*—This medicine, in the dose of from fifteen to twenty drops, "par pot de tisane," combined with the use of decoction of bark and chalybeates, is the remedy which has given the best results in the treatment of albuminous nephritis—(Bright's Disease.) Many cases have already been cured by this treatment.—[*Month. Journ. Med. Science.*]

*Employment of Bismuth in Diarrhæa.*—M. Rayer speaks in praise of the trisnitrate of bismuth when used in the diarrhæa to which phthical patients are so liable, and in that which occurs during the progress of typhus. This remedy has for many years been employed, and often with great advantage, in the simple form of diarrhæa which affects young children.—[*Gaz. de Hôpitaux*, from *London Medical Gaz. South. Journ. Med. and Pharm.*]

*Bed Sores.*—To prevent these, Sir. B. C. Brodie recommends a lotion composed of two grains of bichloride of lime to an ounce of proof spirit, the parts to be washed two or three times a day, beginning at an early period; it acts by generating a thicker cuticle, and may be employed in other cases where a patient suffers from pressure.

[*Ranking's Abstract.*]

*Treatment of Epistaxis by Insufflations of Alum.*—When hemorrhage from the nasal cavities assumes a dangerous aspect, recourse is generally had to plugging, a measure both inconvenient and painful. M. Lecluyse has successfully employed means far more simple, and at the same time, according to his own account, more certain—namely, the insufflation, by means of a quill, of equal parts of powdered gum arabic and alum. In one case this succeeded after three repetitions; other means, and plugging among them, having entirely failed.—[*Gaz. des Hôpitaux.*]

*Application of Ether Vapour to the practice of Midwifery.*—Professor Simpson has employed ether vapour in the practice of midwifery, and is the first, we believe, who has made the application of this agent. The case was perfectly successful, as the following extract will show:

"A few days ago Professor Simpson stated to his class that he had practised with entire success the inhalation of sulphuric ether in a case of the most difficult form of labour, and where otherwise the sufferings of the patient would undoubtedly have been extreme. The mother was lame and deformed. At a former accouchment, the labour lasted three or four days, and, from the necessarily protracted use of instruments, the patient's agonies were very great. On the present occasion, Dr. Simpson had previously determined to avoid, if

possible, the use of all instruments, and to attempt to extract the infant by the feet. He expected to be aided in this by the use of the ether inhalation. Accordingly, when labour had set in for a few hours, the patient was put under the influence of ether, and in a few minutes the child was turned and extricated, while the mother was altogether unconscious of the operation, and that, too, although the delivery was rendered excessively difficult, by the degree of compression to which the child's head required to be subjected. On afterwards awakening, or passing from her 'etheralised' condition to the state of common consciousness, one of the first circumstances of which the patient became aware, was the noise attendant on preparing a bath to resuscitate the infant. A remarkable circumstance pointed out in the case by Dr. Simpson was, that whilst breathing the ether, the labour pains or throes continued, and yet the mother (to speak paradoxically) *felt* no pains. We hear she is rapidly recovering. This is, we believe, the first instance in which this new and extraordinary agent has been employed in the practice of midwifery."

[*London Med. Gazette.*]

---

### MEDICAL INTELLIGENCE.

*Inhalation of Sulphuric Ether in Surgical Operations.*—In devoting a considerable portion of this No. of our Journal to this subject, we feel that we are doing our readers essential service. Having now satisfied ourselves by actual experiment, that very painful operations can be performed while the patient is made insensible and unconscious by the inhalation of pure Sulphuric Ether, we entertain the opinion that a new era is about to dawn upon Surgery, produced by this important discovery. While we have been sceptical and are still so, with respect to the effects of Mesmerism in the alleviation of pain and disease, and hope ever to continue the uncompromising opponents to all species of quackery and patented remedial agents, we are free to admit our convictions concerning the value of this new mode of preparing patients for surgical operations. It is true, that in its first introduction to the profession, it was attempted to be veiled in mysticism and a patent obtained by a dentist in Boston, to whom the subject was presented by Dr. Jackson, its discoverer; but now all secrecy is removed, and no one entertains a doubt as to the identity of the so-called Letheon, with pure Sulphuric Ether. The only questions now agitating the profession are its best mode of preparation; and secondly, is there any danger in its general administration?

We have given Dr. Jackson's mode of preparing the ether he first employed, and which he recommends, and are happy to be able to add the views of two distinguished Professors of Chemistry found below, in answer to interrogatories propounded to them. That which we have used in our experiments was washed in cold water, to remove the sulphuric acid and alcohol contained in the ether of the shops.

To the second question—the danger of its general application to surgical operations, our limited experience will not warrant a reply. It may be years before it can be fully and satisfactorily answered. Direct experiment can alone

decide this question. This much, however, can be said: up to the present time no very unfavorable effects have been produced in any case—certainly none has proved fatal from the ether. Its extended application to relieve or extinguish pain in Surgery and Midwifery may be judged of, by consulting what has been published already in this No.

Our mode of preparation is water  $\zeta$  iii., ether  $\zeta$  iii. to iv., liquid potash 3 i., well agitated in an eight ounce vial. Administration, two to four drachms poured on a handkerchief, and inhaled from two to four minutes.

Reply of JOHN LE CONTE, M. D., Professor of Natural Philosophy and Chemistry, in Franklin College, University of Georgia.

ATHENS, March 16th, 1847.

In reply to the questions propounded in your letter of the 13th instant, in relation to Sulphuric Ether, I must premise, that chemists are not quite agreed concerning the precise changes and reactions which take place during the process of etherification. You are aware, that ether may be prepared by the abstraction from alcohol of one half of its elemental water. Thus, if potassium be placed in contact with absolute alcohol, hydrogen gas is evolved, and a compound of ether and potash crystallizes,— $C^4 H^5 O.$ — $H. O.$ , and  $K.$  giving  $C^4 H^5 O.$ — $K. O.$  and free  $H.$  (Kane.) But it is by the action of sulphuric acid upon alcohol, that ether is, for practical purposes, always obtained. It was formerly thought, as first suggested by MM. Fourcroy and Vauquelin, that the sole principle concerned in the formation of ether was the attraction of sulphuric acid for water, by which the alcohol was directly converted into ether. But, from more accurate researches, it is now obvious, that the process is of a far more complicated nature. That the sole or efficient cause of the conversion of alcohol into ether is *not* the mere abstraction of the water, by the affinity of the sulphuric acid for that liquid, is proved by various circumstances, of which the following are some:—

1. Water may be abstracted from alcohol by alkalis and chloride of calcium, yet nothing like ether is the result.

2. Water passes over, during the whole process, along with the ether, with which the acid ought to combine in preference to dehydrating the alcohol.

3. Ether is not produced by the action of *anhydrous* sulphuric acid on alcohol.

4. Ether is never produced except by the aid of *heat*. (Vide. Brande's Manual of Chem., p. 1284, 5th Ed., 1841.)

Recent discoveries in organic chemistry have induced Berzelius to regard ether as the oxide of a compound inflammable body called *ethule* or *ethyle*; and this opinion has been ably advocated by Liebig. On this supposition, *ethule* consists of four eq. of carbon and five eq. of hydrogen,  $C^4 H^5$ , so that the formula of ether is  $C^4 H^5 O.$  Alcohol is regarded as the hydrate of the oxide of *ethule*. This will be rendered obvious by throwing the formulæ together:—

Hydrate of the oxide of ethule; alcohol,  $C^4 H^5 O, H O$

Oxide of ethale; ether,  $C^4 H^5 O$

Ethule; a hypothetical compound,  $C^4 H^5$



On the ethule hypothesis, the following is an explanation of the changes attending the formation of ether. When sulphuric acid acts on alcohol, the water of both is disengaged, and the sulphuric acid and ether unite to form *Sulphate of Ether*,— $C^4 H^5 O-|-Aq.$  and  $SO^3-|-Aq.$ , giving  $C^4 H^5 O-|SO^3$  and 2 Aq. The ether obtained by distilling a mixture of oil of vitriol and alcohol results, therefore, not from the water being seized on by the former, but from a decomposition of its compound with sulphuric acid, the sulphate of ether. If absolute alcohol and strong oil of vitriol be employed in the preparation of ether, it is found that the distilled product consists of ether and water, forming two distinct layers in virtue of their different specific gravities, but in quantity identical with those which constitute alcohol; 100 parts of the mixed liquids consisting of 19.5 water and 79.5 ether. The oil of vitriol remains in the retort in its original state of concentration, and hence might be applied to etherify an infinite quantity of absolute alcohol, introduced in a continuous stream. (Kane.) To explain this very remarkable result, Mitscherlich advanced that the action of the sulphuric acid on the alcohol is merely *catalytic*; that it splits it, as it were, into ether and water, and these pieces not being able to re-unite, come over in vapor, merely mixed with each other. This idea is, however, quite inadmissible, as the whole quantity of ether is proved to be united with the sulphuric acid in the first place, and to distil over only after the decomposition of the compound that had been so formed. The observations of Liebig and Rose have removed the difficulty, which this simultaneous evolution of water and ether presented to the adoption of the theory, which supposes the ether to be expelled from its combination with the sulphuric acid by the water. In fact, it is only at a particular temperature that the ether and water come over in atomic proportions. The production of ether depends, therefore, upon the facts, that when alcohol and oil of vitriol are mixed, sulphate of ether is formed and water is set free; but on the application of *heat*, this action is inverted, and the ether is expelled from the acid, with which the water recombines. If the distillation be conducted so that the mixture boils, the dilute sulphuric acid concentrates itself, at the same time, by giving off an atom of water, which condenses mixed with the ether, but had its origin in a perfectly independent action. (Kane, Graham, Turner, Fownes, Brande, etc.)

The ether-producing temperature is circumscribed within narrow limits. Below  $260^{\circ}$  no ether is produced; from  $260^{\circ}$  to  $310^{\circ}$ , ether passes over; and lastly, when, by the addition of a large quantity of oil of vitriol, the boiling point of the mixture is made to rise to  $320^{\circ}$  and above, olefiant gas makes its appearance.

The ether formed by the ordinary process is rendered impure by admixture with *alcohol* and *water*, and generally *sulphurous acid*. To separate these impurities, the ether should be agitated with a strong solution of potassa, which *neutralizes the acid*, while the water *unites* with the alcohol. It is then distilled by a very gentle heat,

and may be rendered still stronger by distillation from chloride of calcium. Ether is miscible with alcohol in every proportion, but is very sparingly soluble in water; 10 volumes of water dissolving one of ether, while 36 volumes of ether dissolve only 1 of water. When agitated with water, the greater part separates on standing, a small quantity being retained, which imparts an ethereal odor to the water. The ether so washed is very free from alcohol, which combines by preference with the water; but *some water* still remains dissolved in the ether, which must be removed by adding some fresh burned lime, and distilling a second time.

The specific gravity of pure ether has been variously estimated. According to Lovitz it is 0.700, or 0.632; according to Dumas and Boullay its sp. gr. at 63° is 0.713; according to Gay Lussac's observations its density is 0.715 at 68°, and 0.724 at 54°. The ether of the shops always contains *alcohol*; but it is a monstrous error to infer that its exhilarating effects is due to the presence of *alcohol*. A single fact is sufficient to show the absurdity of this idea, viz: that the effects are proportionate to the *purity* of the ether, or to its *freedom* from *alcohol*. The admixture of the proper quantity of atmospheric air seems to have a considerable influence on its action on the animal economy. If the air be too strongly impregnated with ether stupefaction ensues.

Answer of Professor A. MEANS, M.D., of Emory College and the Medical College of Georgia.

OXFORD, GA., March 16th, 1847.

1st then: "Is there any Alcohol in Ether?"

There is. Almost all the ether found in the shops has some alcohol. The simplest mode to get rid of which is to wash the ether by *agitation* with *twice* its bulk of *water*. Let it stand a little—the alcohol will combine with the water—then pour off the *ether* which will have imbibed a little water. To get it free from this, add a little *unslacked* lime, and *re-distill* the ether.

2nd. "Does it contain Sulphuric Acid?"

It contains, before rectification, sulphurous acid; but the ether of commerce, has generally, I believe, only some alcohol and water.

Here, perhaps, I may remark, that when ether coagulates the *serum* of the *blood* it may be known to contain *alcohol*, as it does not coagulate it when *pure*.

3rd. "Can the exhilarating effects be obviated?"

I know of no means by which this can be *entirely effected*, nor from the chemical constitution of the article and its physiological action, do I believe it possible to avoid *some* manifestation of an excitant power in *some* constitutions. But when the *alcohol* is removed and a pure ether is employed by inhalation, I am persuaded that the excitant effect upon the cerebral functions, &c., are extremely transient, and sometimes not manifested *at all*, and the narcotic and depressing consequences, which are always *secondary*, when both are

interer de ce qui

On the ethule hypothesis, the following is an explanation of the changes attending the formation of ether. When sulphuric acid acts on alcohol, the water of both is disengaged, and the sulphuric acid and ether unite to form *Sulphate of Ether*,— $C^4 H^5 O-|Aq.$  and  $SO^3-|Aq.$ , giving  $C^4 H^5 O-|SO^3$  and 2 Aq. The ether obtained by distilling a mixture of oil of vitriol and alcohol results, therefore, not from the water being seized on by the former, but from a decomposition of its compound with sulphuric acid, the sulphate of ether. If absolute alcohol and strong oil of vitriol be employed in the preparation of ether, it is found that the distilled product consists of ether and water, forming two distinct layers in virtue of their different specific gravities, but in quantity identical with those which constitute alcohol; 100 parts of the mixed liquids consisting of 19.5 water and 79.5 ether. The oil of vitriol remains in the retort in its original state of concentration, and hence might be applied to etherify an infinite quantity of absolute alcohol, introduced in a continuous stream. (Kane.) To explain this very remarkable result, Mitscherlich advanced that the action of the sulphuric acid on the alcohol is merely *catalytic*; that it splits it, as it were, into ether and water, and these pieces not being able to re-unite, come over in vapor, merely mixed with each other. This idea is, however, quite inadmissible, as the whole quantity of ether is proved to be united with the sulphuric acid in the first place, and to distil over only after the decomposition of the compound that had been so formed. The observations of Liebig and Rose have removed the difficulty, which this simultaneous evolution of water and ether presented to the adoption of the theory, which supposes the ether to be expelled from its combination with the sulphuric acid by the water. In fact, it is only at a particular temperature that the ether and water come over in atomic proportions. The production of ether depends, therefore, upon the facts, that when alcohol and oil of vitriol are mixed, sulphate of ether is formed and water is set free; but on the application of *heat*, this action is inverted, and the ether is expelled from the acid, with which the water recombines. If the distillation be conducted so that the mixture boils, the dilute sulphuric acid concentrates itself, at the same time, by giving off an atom of water, which condenses mixed with the ether, but had its origin in a perfectly independent action. (Kane, Graham, Turner, Fownes, Brande, etc.)

The ether-producing temperature is circumscribed within narrow limits. Below  $260^{\circ}$  no ether is produced; from  $260^{\circ}$  to  $310^{\circ}$ , ether passes over; and lastly, when, by the addition of a large quantity of oil of vitriol, the boiling point of the mixture is made to rise to  $320^{\circ}$  and above, olefiant gas makes its appearance.

The ether formed by the ordinary process is rendered impure by admixture with *alcohol* and *water*, and generally *sulphurous acid*. To separate these impurities, the ether should be agitated with a strong solution of potassa, which *neutralizes the acid*, while the water *unites* with the alcohol. It is then distilled by a very gentle heat,



and may be rendered still stronger by distillation from chloride of calcium. Ether is miscible with alcohol in every proportion, but is very sparingly soluble in water; 10 volumes of water dissolving *one* of ether, while 36 volumes of ether dissolve only 1 of water. When agitated with water, the greater part separates on standing, a small quantity being retained, which imparts an ethereal odor to the water. The ether so washed is very free from alcohol, which combines by preference with the water; but *some water* still remains dissolved in the ether, which must be removed by adding some fresh burned lime, and distilling a second time.

The specific gravity of pure ether has been variously estimated. According to Lovitz it is 0.700, or 0.632; according to Dumas and Boullay its sp. gr. at 63° is 0.713; according to Gay Lussac's observations its density is 0.715 at 68°, and 0.724 at 54°. The ether of the shops always contains *alcohol*; but it is a monstrous error to infer that its exhilarating effects is due to the presence of *alcohol*. A single fact is sufficient to show the absurdity of this idea, viz: that the effects are proportionate to the *purity* of the ether, or to its *freedom* from *alcohol*. The admixture of the proper quantity of atmospheric air seems to have a considerable influence on its action on the animal economy. If the air be too strongly impregnated with ether stupefaction ensues.

Answer of Professor A. MEANS, M.D., of Emory College and the Medical College of Georgia.

OXFORD, GA., March 16th, 1847.

1st then: "Is there any Alcohol in Ether?"

There is. Almost all the ether found in the shops has some alcohol. The simplest mode to get rid of which is to wash the ether by *agitation* with *twice* its bulk of *water*. Let it stand a little—the alcohol will combine with the water—then pour off the *ether* which will have imbibed a little water. To get it free from this, add a little *unslacked* lime, and *re-distill* the ether.

2nd. "Does it contain Sulphuric Acid?"

It contains, before rectification, sulphurous acid; but the ether of commerce, has generally, I believe, only some alcohol and water.

Here, perhaps, I may remark, that when ether coagulates the *serum* of the *blood* it may be known to contain *alcohol*, as it does not coagulate it when *pure*.

3rd. "Can the exhilarating effects be obviated?"

I know of no means by which this can be *entirely* effected, nor from the chemical constitution of the article and its physiological action, do I believe it possible to avoid *some* manifestation of an excitant power in *some* constitutions. But when the *alcohol* is removed and a pure ether is employed by inhalation, I am persuaded that the excitant effect upon the cerebral functions, &c., are extremely transient, and sometimes not manifested *at all*, and the narcotic and depressing consequences, which are always *secondary*, when both are

present, will speedily supervene. Indeed, from some cases on record, I should think care and close observation necessary to prevent (in some instances) too great depression of the pulse, and too deep and obstinate stupefaction.

You will allow me to remark, also, that when ether has been kept, for *some time*, and *especially* if frequently opened, it absorbs *oxygen* from the atmosphere and forms some *acetic acid*. This may be known by its turning litmus paper *red* on contact.

Ether, too, if pure, will not *discolor water* when mixed with it; old ether will frequently turn it to a feeble milky white hue.

*Gun Cotton*.—We have received the following mode for preparing the Gun Cotton, from Dr. E. H. OAKMAN, of Columbia County, Ga.

Take a portion of cotton, as free as possible from trash and other impurities, immerse it for thirty minutes in equal portions of nitric and sulph. acids, of the ordinary strength as sold by the apothecary; then, wash the cotton in water until no acid test remains, and allow it to remain a minute or two in a solution of nitrate of potash (20 grs. to an ounce of water.) Express; dry it carefully before a fire; and it is ready for use.

METEOROLOGICAL OBSERVATIONS, for February, 1847, at Augusta, Ga. Latitude 33° 27' north—Longitude 81° 32' west Wash. Altitude above tide 152 feet.

| FEB. | Sun Rise. |           | 2, P. M. |           | Wind. | REMARKS.                       |
|------|-----------|-----------|----------|-----------|-------|--------------------------------|
|      | THER.     | BAR.      | THER.    | BAR.      |       |                                |
| 1    | 37        | 29 75-100 | 67       | 29 77-100 | S. W. | Fair.                          |
| 2    | 37        | " 85-100  | 61       | " 85-100  | S.    | Cloudy—light.                  |
| 3    | 58        | 30        | 46       | " 90-100  | W.    | Storm at 7, A. M.—rain 30-100. |
| 4    | 18        | 29 80-100 | 50       | " 90-100  | W.    | Fair.                          |
| 5    | 29        | " 87-100  | 44       | " 90-100  | E.    | Cloudy.                        |
| 6    | 32        | " 78-100  | 54       | " 76-100  | W.    | Cloudy—light.                  |
| 7    | 43        | " 70-100  | 52       | " 61-100  | S.    | Rain 10-100.                   |
| 8    | 42        | " 65-100  | 62       | " 62-100  | S. E. | Fair.                          |
| 9    | 44        | " 66-100  | 62       | " 50-100  | S.    | Cloudy.                        |
| 10   | 58        | " 46-100  | 59       | " 56-100  | N. W. | Fair.                          |
| 11   | 34        | " 89-100  | 46       | " 92-100  | N. W. | Fair—blow.                     |
| 12   | 27        | " 94-100  | 48       | " 93-100  | N. W. | Fair—blow.                     |
| 13   | 31        | " 95-100  | 60       | " 85-100  | S. W. | Fair.                          |
| 14   | 35        | " 90-100  | 63       | " 92-100  | S. W. | Fair—smokey.                   |
| 15   | 32        | " 95-100  | 63       | " 95-100  | S.    | Fair, do.                      |
| 16   | 44        | " 96-100  | 70       | " 95-100  | S.    | Fair, do.                      |
| 17   | 53        | " 94-100  | 68       | " 85-100  | S. W. | Cloudy.                        |
| 18   | 48        | " 88-100  | 74       | " 85-100  | S. W. | Cloudy.                        |
| 19   | 60        | " 93-100  | 72       | " 95-100  | S. W. | Cloudy—rain 10-100.            |
| 20   | 59        | " 95-100  | 76       | " 95-100  | S.    | Cloudy. [35-100.               |
| 21   | 59        | " 81-100  | 72       | " 95-100  | S. W. | Cloudy—thund. & light.—rain    |
| 22   | 54        | " 57-100  | 57       | " 61-100  | W.    | Fair—blow.                     |
| 23   | 34        | " 90-100  | 55       | " 57-100  | N. W. | Fair.                          |
| 24   | 33        | 30 3-100  | 56       | 30        | E.    | Cloudy.                        |
| 25   | 47        | 29 84-100 | 70       | 29 81-100 | S. W. | Fair.                          |
| 26   | 46        | " 79-100  | 51       | " 69-100  | E.    | Rain 1 inch and 10-100.        |
| 27   | 54        | " 24-100  | 60       | " 27-100  | W.    | Fair—blow.                     |
| 28   | 36        | " 66-100  | 51       | " 74-100  | N. W. | Fair.                          |

Quantity of Rain 1 inch and 95-100. Wind East of N. and 18 days.

# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

Vol. 3.]

NEW SERIES.—MAY, 1847.

[No. 5.

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE XV.

[NOTE.—We are compelled to omit the Hebrew and Greek employed in this Article. We learn that the talented and indefatigable author studied the former language for the express purpose of comprehending this very subject—The Medicine of the Bible. Edrs.]

*Notes on the Medicine of Moses.* By JOHN M. B. HARDEN, M. D.,  
of Liberty County, Georgia.

1. PHYSICIANS.—The early history of Medicine is necessarily involved in much obscurity, and in regard to its doctrines and practice we shall probably always remain in our present state of ignorance, inasmuch as no writings expressly upon the subject earlier than those of Hippocrates have come down to us. Hence, although it is generally conceded that much is due to the Egyptians for their knowledge in this as in other Sciences, writers upon this subject following the example of Celsus and of Pliny, always regard him as the “Princeps Medicinæ” or “Father of Medicine”; and it seems to be the general impression, that previously to this time the art of healing was confined entirely to the Priesthood, and the discovery of remedies the result of accident or random experiment. This sentiment is distinctly avowed by Dr. Parr,\* and still more recently by Broussais,† who uses the language of LeClerc,‡ and the former goes on farther to declare that Hippocrates “seems to have been the first to whom

\* Medical Dic. Art. Med.

† Examen. des doc. Méd. tome premier.

‡ The opinion of LeClerc upon this subject, may be gathered from the following passage: “Si Hippocrate n’a pas tout-a-fait passé pour le premier inventeur de la Médecine, il a, pour le moins, eu, de l’aveu de toute l’antiquité, la gloire d’être le premier, après Esculape & ses fils qui l’ait relablié; ce qui est la même chose que si l’on disoit qu’il l’a inventée, comme on le peut inferer de ce qui l’



the appellation of Physician in its modern acceptation is due.”\* Now, we may differ in the use of this term, and if by Physician be meant a *true medical philosopher*, we cannot question the correctness of the remark, although by it many shall be proscribed in our own day who lay claim to the appellation, but if it mean, as we are disposed to think is its most usual signification, a *healer or curer of Diseases*, by *profession*, there can be no doubt to the reader of the Pentateuch, that such a class of men has existed in the earliest times of which we have any knowledge.

My reasons for this belief, are briefly these :

First, That the original word, translated Physician, can mean nothing else than a *healer of Diseases* ;

Secondly, That they are referred to as distinct from the Priests, whose office generally was of a very distinct character ; and

Thirdly, That as in all subsequent periods, they were remunerated for services rendered in cases of sickness.

1. The word Physician, occurs for the first time in Genesis, c. 50, v. 2, where it is said that Joseph “sent for his servants the Physicians to *embalm* his father.” From the fact that nothing is said of their having attended him during his sickness, it is inferred that their sole occupation was the embalming of the Dead for burial, and hence the Septuagint, which is certainly high authority in the interpretation of the Hebrew Scriptures, has rendered the word by *entaphiastai*, literally those who intomb, or prepare the body for being intombed ; but the original word (*rapha*), from which is derived (*rophiim*), translated Physicians, has no such signification. The leading idea conveyed by the word is that of *healing or restoring to health*, and the literal translation would be *HEALERS or CURERS*, and this is indeed the rendering given to the same word by the Septuagint, in 2d Chronicles, c. xvi. v. 12, where the word *iatros*, is very properly used as expressive of its meaning. It cannot, however, be denied, that at this time, as for a long time subsequently, an important part of their business was to embalm the dead. But this process was expressed

---

été dit ce devant.”—Histoire de la Médecine prem. part. page 113. The author, however, cites many examples of the practice of the art long before the time of Hippocrates—Vide the work above referred to—passim.

\* Hippocrates himself was disposed to concede more than this to his predecessors—In his book on ancient medicine, he says: We ought not to suppose that the healing art did not exist in former times, nor ought we to think, because we do not everywhere meet with the requisite accuracy, that its laws were investigated without skill. On the contrary, we have reason to be astonished at the

by a very different word, (*khanat* or *chanat*), and it is to be presumed that if this had been the sole occupation of Physicians, some derivation from the word would have been used to designate them.

2. It is to be supposed that on account of the heavy bondage which the Hebrews endured in Egypt, they were denied the privilege, in a great degree, at least, of studying the *\*Arts and Sciences* cultivated among them, and that whatever knowledge they had of these subjects was imparted to them by Moses, who, together with the aid of inspiration, is said to have "been learned in *all the wisdom* of the Egyptians." It is not to be wondered at, therefore, that in the passage through the wilderness the treatment of diseases should have been entrusted to the Priests (*kohanim*) under the direct superintendence of Moses, who laid down certain rules and regulations by which they were to be governed. Very soon, however, after the possession of the Promised Land, we find Physicians again referred to as a distinct class, for it is written in 2d Chron. xvi. 12, that in the sickness of Asah, "he sought not unto the Lord, but unto the Physicians," where the word (*rophim*) is again used.

3. The remuneration of Physicians for services rendered is certainly a satisfactory proof of their having pursued the practice as a distinct profession. That they were thus remunerated may be clearly deduced from the allusion made to it in the following enactment of the Levitical Law. "If men strive together, and one smite another with a stone or with his fist, and he die not, but keepeth his bed, if he rise again and walk abroad upon his staff, then shall he that smote him be quit, only he shall pay for the loss of time and shall *cause him to be thoroughly healed.*" (Exod. xxi. 19). The Septuagint has it, *shall pay the Physicians fees*, which, without doubt, conveys the true sense of the original.

We have no means of ascertaining what may have been the *qualifications* of Physicians before or at the time when Moses wrote. It is supposed by some† that the practice of Circumcision implies some knowledge of *Surgery*; but when we are told that Zipporah performed the operation upon her son with a sharp stone, (Exod. iv. 25.) we are induced to believe that it was regarded then as now, to be a very simple operation, and one which could be performed by the most

important discoveries that were made in times when the greatest ignorance prevailed, and that were made, moreover, not by chance, but as the result of correct and careful investigation.

\* We have no account of their having cultivated any other than the most servile of the Arts. Exod. i c. 11 v.

† Jahn's Archaeology, p. 115.

unskillful.\* The elaborate treatise upon the Leprosy in the 13th of Leviticus, gives evidence of much accurate knowledge of Cutaneous Diseases, and the ability to recognize the diagnostic signs of these affections must have required a considerable degree of study and close observation.

The process of embalming the dead, which we have said was an important part of the business of Physicians in those days, was so simple that it could not have required any *great extent of learning*, and it was most probably an hereditary art, descending from father to son.

† Herodotus describes three methods of embalming among the Egyptians, differing chiefly in the amount of care bestowed and the value of the materials used. In the first they removed the Brain through the nostrils by means of a *curved metallic instrument*, and filled the cavity with various medicaments. They next used a sharp Æthiopian stone in making an opening into the abdomen, through which they drew out the bowels; they then washed the cavity with Palm wine, and filled it with bruised Myrrh and Cassia, and other aromatics, after which they sewed up the opening. The body was then kept salted with Nitre during seventy days, at the end of which time it was well washed and enveloped in Linen which was smeared over with a kind of Gum.

In the second, they used an injection prepared from the aromatic oil of a species of Cedar, which was thrown into the bowels by the rectum. The body was then kept in common salt for the same number of days, (seventy,) after which they removed the injection, which is said to have had the strange property of bringing away with it the contents of the abdomen destroyed by its action.

In the last, and most simple way, they cleansed the Bowels by oblations, and kept the body well salted for the space of seventy days.‡

\* The Practice of Surgery is distinctly alluded to by the Prophet Ezechiel in the following passage—"Son of Man I have *broken* the *arm* of Pharaoh, King of Egypt; lo, it shall not be *bound* up to be healed, to put a *roller* to *bind* it, to make it strong to hold the sword." xxx. 21.—See also xxxiv. 4, 16.

† Euterpe, 86, 87, 88.

‡ The Æthiopians had a much more elegant method of treating their dead. After all the moisture is exhausted from the body, by the Egyptian or some other process, they cover it totally with a kind of plaster, which they adorn with various colors, and make it exhibit as near a resemblance as possible to the person of the deceased. They then inclose it in a hollow pillar of crystal, which is dug in great abundance and of a kind that is easily worked. The deceased



These, or some one of them, were probably the methods employed in the time of Moses, and although rude and unscientific in appearance, answered well the purposes for which they were intended. Bodies treated in this way have been preserved for many centuries without having undergone decomposition.\*

Leaving for a while the writings of Moses, we may be able to form some estimate of the state of Medical Science at this time, by considering the progress which it must have made some centuries after. About five hundred years before Christ the Egyptians were considered to be the most renowned Physicians in the world, and if a division of labor in any Art or Science may be taken as evidence of the degree of perfection to which it has attained, they were *rightly entitled* to this distinction; for we are informed by Herodotus that there was a Physician for every disease to which they were subject.†

In the luxation of the foot of King Darius, occasioned by a fall from his horse, he sent immediately for the Egyptian Physicians, and although the cure of the King was attributed by the Greek Historian to his countryman, Democedes, there can be no doubt that it

---

is very conspicuous through the crystal, has no disagreeable smell, nor any thing else that is offensive. The nearest relations keep this pillar, enclosing the deceased, for a twelve-month in their houses, offering before it different kinds of victims, and the first fruits of their lands. These are afterwards removed and set up round the city.—*Herodotus Thalia*. 24.

Ctesias of Cnidus considers the account of Herodotus as incorrect. His own statement is as follows:

They first embalm the body, but do not, immediately after that, inclose it in the transparent substance (crystal) mentioned by Herodotus; for since this can be done only whilst the substance is in a state of fusion, the action of the heat would destroy the body, so that nothing would remain of its original appearance. They therefore make a hollow statue of gold, into which they place the body, and then pour the transparent substance round it. The golden statue, therefore, which bears a near resemblance to the deceased, and not the body itself, is seen through the crystal. The rich only are disposed of in this way; those that do not leave great treasures obtain silver statues, and the poor, statues of clay.—*Diodorus Bibl. Hist.* lib. 2.

\* The valuable collection of the crania of Egyptian mummies from the Catacombs of Thebes, now in the possession of Dr. Morton, at the Hall of the Academy of Natural Sciences, Philadelphia, confirms in a remarkable manner the account given by Herodotus. Two of these crania present the appearance of having been gilded over, and no doubt belonged to persons of high rank. They must be 3000 years old, and are yet in a good state of preservation.

† Every physician attends to one disease only, and not to any more.

had been reduced before he was called in, for Democede did nothing more than use soothing applications to the part for the violent pain which the King suffered. That Democede was a good Physician, however, is shewn in the skill which he afterwards displayed in the treatment and cure of an ulcer of the mamma, under which Atossa, Darius's wife, labored, and which seems to have been of a malignant character.

II. APOTHECARIES.—Pharmacy, or the art of preparing and compounding drugs or medicines, was evidently practised in the time of Moses, and under the phrase "Art of the Apothecary." *Maaseh rokeahh*\* is referred to by him as a thing well understood long before. The art at this time was confined mostly, perhaps, to the preparation of *ointments* and *perfumes* for religious as well as *medical purposes*. The "*anointing oil*" and the "*pure incense*" were commanded to be made according to the formulæ of this art. The word *rokeahh* is derived from the root *rakahh*, which Mr. Parkhurst says means in Kal, to Compound, and is rendered in the Vulgate, by the Latin, Componere. It means also to *spice* or *season*, and the marginal readings renders it by the word "Perfumer," and in 1st Samuel, viii. 13., by "Confectioner."

Among the articles of their *Materia Medica*, or more properly, *Pharmacopœia*, may be included their "Spicery" or *Perfumes*, *necoath*, called also *bosem* and *sammim*, and their healing *Medicines*, *rephuoth*, which seem to have consisted for the most part of external applications.

We will briefly enumerate the most conspicuous of these articles, premising that we by no means intend to signify that they all were considered medicinal, or used as medicines.

---

\* Literally "*work of the Apothecary.*"

† Pliny (Natural History 13. 1.) seems to say that ointments were never used until after the time of Troy, and gives the credit of first preparing them to the Persians. He says that the first notice of them that he had seen was an account of a box of ointment found by Alexander in the Camp of Darius after his defeat among the other articles of the King's baggage. Herodotus, who is the oldest Greek Historian whose writings have come down to us, and who has been styled the "father of History," mentions an oil (*Euterpe*, 95) called "Kiki," with which the Egyptians anointed the body, and tells us that the Scythian women made use of an ointment prepared by bruising under a stone the wood of the Cypress, Cedar, and frankincense and pouring water upon it until it became of a certain consistency. (*Melpomene*, 75.) It is very evident too, that a compound ointment is referred to in many places in the Old Testament, as used among the Jews.

*Shemen zaeth*, *Oleum olivarum*, Oil of olives.

At the head of the catalogue may be reckoned the olive oil, so generally and so variously used from the remotest antiquity. Besides being used by the Hebrews for domestic purposes in the stead of Butter, and for the burning of Lamps, &c., it entered into and formed indeed the chief ingredient in all their ointments and perfumes. There can be no doubt that the tree from which it was obtained is the same as that from which we now derive it, the *Olea* of European Botanical writers.

*Tseri*, *Balsamum*, *Balsam* or *Balm*.

This is generally supposed to be the *opobalsamum* of Pliny, which is the Resin exuding from the tree by incisions made in the Bark. The small twigs which were sometimes used instead of the Resin, in the preparation of ointments, were called by him *Xylobalsamum*.

The tree from which it was obtained was supposed by Linneus to be the *Amyris*, to which he gave the trivial name of *Gileadensis*.

\*Pliny describes it as being in habit more like the Vine, and having leaves like the Rue. He mentions three species, the *Eutheriston*, *Trachq*, and *Eumices*. It was an article of commerce with the Gileadites, who exported it in quantities into Egypt. (Gen. 37. 25.)

*Mor*, *Myrrha*, *Myrrh*.

The *Myrrh* of the ancients was probably the *Myrrh* of the present day, with which we are well acquainted, but the tree which yields the drug is not known. It has been variously attributed to a species of *Acacia*, *Amyris*, and *Scandix*. It is described by the †Roman Naturalist, as growing to the height of 7 to 10 feet, having a harsh, crooked and thorny trunk, larger near the root than higher up.

The *Nataph*, or *Stacte* of the Greeks and Romans, is only a purer variety of *Myrrh*. It was that Gum which exuded spontaneously from the *Myrrh* tree, and was considered highly valuable. *Sudant autem sponte prius quam incidatur stacten leesam, cui nulla præferatur.*”†

*Lebonah*, or *Thus*, *Frankincense*.

This is the *Olibanum* of the Shops, still used by the Greek and Roman Churches in the burning of incense. It must not be confounded with the common *Frankincense* or *Thus* of the London

\* Hist. Nat. 12. 51.

† Op. cit. 12. 34.

: Pliny. Dioscorides regarded it to be a certain oil expressed from *Myrrh* macerated in water. Some suppose it to be oil of cinnamon.



Pharmacopœia, more generally known as Burgundy Pitch, which is obtained from the *Pinus Abies*.

There is a contrariety of opinion in regard to the tree yielding this article. Linneus supposed it to be the *Mimosa Nilotica*, the same tree which produces Gum Arabic. Others suppose it to be the *Juniperus Lycia*. Dr. Parr considers it most probable that it is the *Amyris Kataf* of Willdenow.

Herodotus mentions the tree or trees as growing abundantly in Arabia, and says that they are usually so infested with serpents that the Arabs, in order to collect the Frankincense, are obliged first to drive them away by burning under them the wood of a species of *Styrax*, the smoke of which they cannot endure.\*

*Lot*, or *Ladanum* or *Labdanum*.

This word, used only in Genesis xxxvii. 25 and xliii. 11, is rendered in the Septuagint, by the Greek, *etakte*, and *Myrrh* in the present authorized English version. The Syriac and Chaldaic versions interpret it Pistachio Nuts, the Arabic Chestnuts.† Mr. Parkhurst says "that the most probable interpretation of the word seems to be that of Junius and De Dieu, who take it to mean *Ladanum* or *Labdanum*, which is a Balsam or Gum oozing from the leaves of the *Cistus* tree, which is common in Cyprus and some parts of Arabia."

I was for a time under the impression, from the obvious analogy in the orthography, that it might mean some variety of the *Lotus* plant, and the impression was strengthened by the fact that the name of this plant is of Egyptian origin.‡ But inasmuch as the *Lotus* afforded a very substantial kind of bread upon which a whole nation (the *Lotophagi*) is said to have subsisted, it is not probable that Jacob should have had enough of it to make a present of it to the Governor of Egypt, while at the same time his family was so pressed with the famine as to make it necessary to send under any sacrifice to buy food, that "*they might live and not die.*" The habital of the plant also seems to militate against such a conclusion.

The more probable inference, therefore, would appear to be that since the Hebrew Letters, *Tait* and *Dawleth*, are in many instances convertible; the Greek is derived immediately from *Lot* quasi *Lod* or *Led*, and that it is the same as *Ladanum*, a name applied by the Arabs to a fragment substance which was found upon the beard of

\* *Thalia*, 107.

† Vide. Gesenius de verbo.

‡ There grows in the water an immense quantity of plants of the lily species, which the Egyptians call the *lotus*. (*Herod. Euter.* 92)

Goats, collected there as is supposed whilst eating the leaves of the *Cistus Ladaniferous*.\*

*Shelbenah* or *Chelbenah*, Galbanum.

This is considered to be the gummy resinous substance, derived from the *Bubon Galbanum*. The plant grows in Syria, and some parts of Africa. It is an umbelliferous plant allied to the *Ferula*, from which plant Pliny says it was extracted. It is a medicine of some considerable powers, being allied in its properties to its cognate Gum *Asafœtida*.

*Kinnamon*, *Cinnamomum*, Cinnamon.

This Aromatic was probably the same as that now used by us and obtained, as is well known from the *Laurus Cinnamomum* of Linneus. † Herodotus says the Arabs did not know any thing about the tree which yielded it, and tells the following strange story about the manner in which they collected it. It was said to be one of the chief ingredients in the nests of a certain large bird which were built in places inaccessible to man. In order to get the nests, therefore, the birds were fed with dead asses and cows, the flesh of which they would carry up in such large quantities as by its weight to cause the nests to fall.

*Kidah*, Cassia.

There is some doubt about the plant designated by this name. It is supposed to be the same called in Psalm xlv. 9, *Ketsioth*, from *Katsa*, whence the Greek and Latin Cassia. The Septuagint has it *iris*, and it would seem correctly if Herodotus may be believed, who speaks of it as an equator plant. (It grows in shallow, stagnant water.) Pliny, however, doubts all that Herodotus says upon the subject, and describes it as growing with the Cinnamon, and even upon mountains; and following him it is generally believed to be the *Laurus Cassia* of Linneus.

*Kenebsem*, *Calamus odoratus*, sweet scented Calamus.

The Hebrew root from whence the name of this plant is derived signifies to hold, contain, and, as Mr. Parkhurst observes, it is probable that the Greek, *Kenos*, and perhaps the Eng., Cane, may be derived from it. It was no doubt applied to a plant with a hollow stem. The plant designated by it is most probably the Asiatic *Calamus Aromaticus*, and not the *Calamus Aromaticus* of the shops,

\* Vide. Herod. Thal. 112. Our object in the notice we have given above of this plant, is to shew the distinction between it and Myrrh.

† Thalia, iii.

which is the *Acorus Calamus* of Linneus. "The names of *Calamus Aromaticus* and the *Acorus* differ: the first is a stalk of an Eastern reed which is slender, *hollow*, white and of a fragrant smell. It is also called *Calamus Odoratus* and *Arundo Syriaca*, but is only probably a variety of the *Acorus*."\*

*Ahalim*, Aloes.

This word is only used *once* in the Pentateuch that I am aware of, and then it is spoken of in such a manner as to leave no room to conjecture what kind of a plant it was; but in Proverbs vii. 16, where it is again used, we learn that it must have been a fragrant aromatic plant, and although translated, in our Bible, Aloes, does not mean the substance so called at the present day. It is supposed to be "the wood of a tree growing in the East Indies, with red fruit resembling pepper corns, called by Linneus *Exœcaria Agallocho*." It seems to have been used entirely as a Perfume.†

*Erez*, *Cedrus*, Cedar.

The term Cedar has been indifferently applied to many species of the Natural Order of the Coniferæ, and as originally used may have embraced them all. From the allusion made to it in 1st Kings, it appears that the Cedar of Lebanon was the most noble and majestic of all the trees of the East. It is supposed to be the *Pinus Cedrus* of Linneus. The Cedar was used in Architecture,‡ in embalming the dead,§ and in Medicine.|| In Leviticus it is spoken of as having been used for the cleansing of the Leper, but how far this, together with the blood of a bird, the Scarlet wool and the Hyssop, was regarded as medicinal, or merely typical, it is difficult to determine. It is certain that the Leprosy was considered as healed before it was used, but still its detersive cleansing qualities are implied in the fact that it was considered as emblematic of the cleansing of the Leper from a disease which was then considered as incurable.

*Ezob*, *Hyssopos*, Hyssop.

The Greek, Latin and English terms above given, seem evidently derived directly from the Hebrew, but it is evident that our word is applied to a plant which was not designated by the original. It is spoken of in 1st Kings, in contrast with the Cedar of Lebanon, which

\* Dr. Parr. de verbo.

† Our object in noticing this plant is simply to shew that it does not mean the Aloes used by us.

‡ 1. Kings, c. vi.

§ Herodotus.

|| Lev. xiv. 4. Pliny—Celsus.



would imply that it was regarded then as the humblest of all plants.\* It is said to have grown out of the wall, and in all probability it was a plant belonging to the Cryptogamizæ and of the Natural Family of the Filices or Musci of Linneus. Those who regard it as being the "Wall Polypody" seem to me to be near the truth. This plant we have already said was used in the cleansing of the Leper. From its cleansing purifying qualities arose, no doubt, the ejaculation of the Psalmist, "Purge me with Hyssop and I shall be clean," (Ps. li. 7.), but, as in the case of the Cedar wood, we have no means of ascertaining how far it was regarded as medicinal in the cleansing or healing of the Leprosy.

*Tenah*, Ficus, Fig-tree.

The fig-tree, although chiefly celebrated for its delicious fruit, was nevertheless used in Medicine, and it is one among the few remedies whose mode of application, as well as the disease to which it was applied, is clearly told. It was the application of a lump of figs to the bile of Hezekiah, (*Shehkin*.) by the advice of Isaiah, that cured him of his malady. The fig forms a very important article in the *Materia Medica* of Celsus, and it is curious to remark that he recommends its use in a disease probably of a similar character, viz., a kind of ulcer, "*quod a favi similitudine herion a Graecis nominatur.*"

Under the name of Fig, various species of the Genus *Ficus* of Linneus are included; some with edible and others non-edible fruit. The former seems to have been used in Hezekiah's case.

*Shehheleth*, (Sept.), Onycha.

This is the only substance used in the preparation of the fumes or ointments which was obtained from the animal kingdom, if indeed it be so, and it seems to be the general impression of those who have examined the subject so far as I can ascertain. The particular animal or animals are not known, but it is believed to have been shells of various species of the Testaceæ, which, when burnt, yielded a fragrant odor. I have not been able, by the few helps that I have, to satisfy myself upon the subject.†

---

\* Le Clerc supposes it to have been a small tree, from the fact that it is mentioned among the *trees* of which Solomon wrote, but it is evident that this expression is *general*, including both trees and plants of every kind.

† There are several other words used in the Pentateuch, representing substances probably of highly active medicinal properties, but they are used in such a general and figurative sense that we shall only refer to them. Thus the word *Rash*, translated in the Septuagint by Gall, or Venom, was used probably

The most celebrated of all the above articles in a medicinal point of view seems to have been, from the frequent references made to it in the Sacred volume, the Balm or Balsam of Gilead. The following passage, among many others of a like kind substantiating my remark, will occur to the reader: "Is there no BALM in Gilead; is there no physician there? why then is the health of the daughter of my people not recovered?" (Jeremiah viii. 22.)

III. MIDWIVES.—From allusions made to it in the Pentateuch, we may reasonably infer that the Practice of Midwifery was pursued as a distinct profession, long before the time of Moses. The first mention that we have of Midwives is made in Genesis xxxv. 17, where we are told that Rachael, in her journey from Bethel to Ephrath, was taken in labor with her last child, Benjamin, during which she died. The names of two Egyptian Midwives are given in the first chapter of the Book of Exodus.

The origin of their appellation, and the notice taken of them in these places, sufficiently explain the nature of their occupation. The word *Meyalledeth*, translated Midwives, is a participle, used as a noun, from the word *Yaledh*, to bring forth, and in Piel, from which form the participle is borrowed, has the force of helping to bring forth; so that this noun really, literally signifies *HELPERS OR ASSISTANTS in parturition*, a word far more expressive than that used in our own language. The word being in the feminine gender, we may presume that it was a business practised only by the female sex, although this is by no means certain.

What may have been the *amount of information* possessed upon the subject must remain a matter of conjecture. The fact that the Egyptian Midwives were recognized by the King, is sufficient evidence, I think, that they must have been *legally* qualified and that they had gone through some probationary course preparatory to

for Poison of any kind. So also the words *Laenah* and *Merorim*, Wormwood and Bitter Herbs, are so general in their signification that it is impossible to know, with any degree of probability, what kinds were intended. They seem only clearly to mean herbs or plants that were disagreeable to the taste, or *bitter*, and even *poisonous*; for Bitterness and Poison were intimately associated in the minds of the Hebrews. The bitter water (*Meha marim*) used in the trial of jealousy, was prepared by mixing the dust of the floor of the tabernacle in holy water. When it took effect it seems to have caused abortion and *barrenness*. (Num. v. 28.) May not the properties of this water have been due to the fungi growing on the floor, and mixed with the dust of the tabernacle?

entering upon the Practice of the Profession. The prognosis of the one who attended upon Rachael "Thou shalt have this also," although it was evidently a case of great difficulty and danger, shews that she must have understood the *mechanism of the Labor*.

It has been and still is a matter of doubt among commentators, what is the true signification of the word *Abhnayim*, translated "stools." Two opinions are entertained in regard to it, one that it intends a *stone bathing trough*, in which the mother and infant were washed soon after delivery: the other that it was a *stone seat* for the parturient woman, "*Sella mulieris parturientis*."

It is evident, from the signification of the original word, that the utensil was made of stone. In Exodus vii. 19, it means vessels made of stone for holding water. In Jeremiah xviii. 3, it is called a Potter's wheel, which Dr. Clarke says is *even now* made of stones. It is also evident from the force of the particle *al*, in the sentence where it is used, that the woman must have been placed *upon* and not *by* it, as Mr. Parkhurst supposes; for although it *may have such a signification*, it is by *no means the most usual one*. We think, therefore, that there can be no impropriety in supposing that it was a *stone vessel* made on purpose for such occasions, on which the parturient female sat during *at least* the first stage of Labor, and into which the Liquor Amnii was received. I have found that the sitting posture is the one most readily chosen by parturient women, and indeed it is not an easy matter to get them to assume any other, except in cases where manual interference becomes necessary. Some I know have had Chairs made for the purpose, with perforated seats. I recollect the first case to which I was called in my practice: I found the patient (a negro) seated on the front edge of a chair, with her hands suspended above; a midwife under her, and waiting to receive the infant, whilst the patient was yelling at a most furious rate. I did nothing, and in a short time afterwards she *was safely* delivered. In consequence of this mode of conducting a labor, the frequent lacerations of the perineum which occur among us may in great part be due.

The expression, therefore, seems to be equivalent to our "brought to bed," or the French "*accoucher*." I must, however, agree with Gesenius in the remark that "a greater knowledge of ancient manners and customs is necessary to determine the *true meaning of this word*" as used in this connexion.



## ARTICLE XVI.

*Cases Cured by Blistering the Spine.* By JOHN DAVIS, M. D., of Abbeville C. H., South Carolina.

Since reading the excellent articles of Professor Ford, of the Medical College of Georgia, on Intermittent and Remittent fevers, their pathology and treatment, whose opinions on these subjects are peculiarly entitled to a favorable reception by the profession, I have thought a few cases which occurred in my practice, (which I have not hitherto designed for publication) might not be altogether uninteresting to the readers of this Journal.

I shall confine my remarks to a simple, unvarnished statement of the facts of each case, and leave the reader to draw his conclusions for himself. It may not be amiss, however, to observe here, that those who have paid particular attention to the nervous system, in the treatment of our autumnal fevers, and in fact a host of other diseases, are alone capable of appreciating the importance that is now being attached to this subject, by a respectable portion of the profession, and which is destined, at no great period, to effect an entire revolution in the principles of their cure.

CASE 1st. Mrs. C. applied to me (April 5th, 1841,) for advice in the case of her daughter, aged 20 years: says she has not been regular in her monthly sickness for four years; sometimes more than natural is discharged, then again scarcely any appearance at all, and again an entire suppression for eight or twelve weeks; bowels constive; appetite bad; pain in the right shoulder and side; shortness of breath on the least exercise; pain, and at times swimming in the head; has been subject to attacks of the third day chills more or less frequently for the last three years, both winter and summer; occasional fevers, attended with a burning in the soles of the feet and palms of the hands; dry, bilious tinge of the skin; sick stomach; urine scanty and high colored; pain in the small of the back and hips; very much troubled with keen pains about the chest, attended with twitching of the muscles of the breast. I am informed that the cause of her general bad health cannot be easily accounted for, unless it be an imperfect recovery from a severe attack of, what the medical gentleman who attended her called, "congestive fever," previous to which she had enjoyed remarkably good health.

Having, but a short time previous to this, returned from the North,

where I had received a thorough drilling on spinal irritation, by Prof. Revere, then, of the Jefferson Medical College of Philadelphia, and the patient having exhausted the entire catalogue of remedies usually prescribed for "liver complaint," &c., with little or no benefit, my attention was directed to the spine. On examination it was found very tender at different points, but more particularly at the two first dorsal and first lumbar vertebræ. The slightest pressure on the lumbar vertebræ gave the most excruciating pain. Prescribed a pill composed of equal portions of rhubarb and aloes, to be taken at bed-time, as circumstances might require. Applied a blister three inches broad, extending from the nape of the neck down the side of the spine to the sacrum, to remain till it draws well, then to be dressed in the usual way.

This prescription was made on the 27th of same month, and on the second of May, (just five days) there was a decidedly favorable change, in all the symptoms. The blister was now applied to the other side of the spine, and alternately changed from one side to the other, till its fifth application, when the lady declared she felt so well that she did not think it necessary to draw another, at least for a day or two. It will be recollected that there was a blister, running on one or the other side of the spine, for a little over six weeks, when the case was discharged cured; though she was quite weak, for which I prescribed the tr. of iron. She has ever since enjoyed the most uninterrupted health.

In about two or three months after I pronounced this case well, I requested an examination of the spine, which I made, very minutely, but could not discover the slightest tenderness. It may be proper also to state that this lady had taken medicine, from various physicians, during a great part of her bad health, for "liver complaint," and various other "complaints," with no perceivable benefit.

CASE 2. W. R.—, sent for me, on the 8th Sept., 1844—I found him laboring under the following symptoms: great oppression at the stomach; difficulty of breathing; great thirst; dry, hot skin; yellow, bilious tinge of the eyes; pulse quick and tense; pain in the head; furred tongue, &c. Had a chill about three hours ago, and says it was the severest one he has had in his life. However, he got better in some three hours, and gave me the following history of his case: About one year ago he had a chill—the first one he ever had—that he sent for a physician, who gave him quinine freely for three days; when he missed the chill, and got up, but by no means felt

well—in about two months afterwards took another chill, which was also checked by the quinine; but about the middle of December following he took the “third day chill,” and it lingered about him, occasionally, till about one month ago, but did not confine him to bed, yet he was unable to take much exercise, owing to a fulness about the chest, and a shortness of breath: says his bowels during the whole time have not been costive, but, at times, rather the reverse. Ordered, five Cook’s pills, and went to bed. In the morning I examined the spine, and found the second dorsal vertebra quite tender, or in other words, he said when I pressed on it, it excited rather an agreeable sensation than otherwise. He also complained of weakness of the whole back, with an occasional soreness when he bent it, or moved suddenly.

This patient having a great aversion to quinine, from the large quantity he had taken during the last year, and believing as I did, that the blistering would “break the chill,” I resolved on its immediate application, and accordingly it was applied as in case 1st. The pills operated quite gently, and I ordered nothing farther to be taken that day. The next day, being the one in order for the chill, I promised to return and do all I could to prevent it.

10th. Blister has drawn well; patient feels much better; at breakfast took a little milk and mush; at 2 o’clock, P. M., the time for the chill, there was discovered slight febrile action: no chill.

11. Patient feels quite smart; difficulty and oppression much relieved; appetite much improved; skin cool and soft.

12th. Has had no chill to-day, nor fever; much relieved, and now says he feels, for the first time in six months, that he will get well. I now dieted him, and prescribed the application of the blister to the other side, so soon as the first began to dry; but it was not attended to, as he had improved so rapidly and found he could do without it. The chills did not return in this case; and in three months from the time I first saw him, he enjoyed as good health as he ever did.

CASE 3rd. Sept. 26th, 1844, I was sent for to see Mrs. R—, aged 33 years—the mother of four children—general health delicate—has taken a great deal of medicine during the last six or eight years, for the chills, dyspepsia, “liver complaint,” &c.; has now had a chill every other day for three days; has considerable fever; sick stomach; pain in the head and right side; furred tongue; costive bowels, &c. Examined the spine, but found little or no soreness.—Prescribed, 10 gr. calomel, to be taken and followed with cast. oil, in



four hours, if necessary. Left 20 gr. sul. qui., in 2 gr. doses, to be taken every two hours the next day, in a tablespoonful of snake-root tea.

23th. Medicine operated well; slight chill and very little fever. Left 20 gr. sul. qui., to be taken the day following.

30th. Patient has had no chill to-day, but is unable to set up in bed. Prescribed, pills of aloes and rhubarb, to be taken at bed-time, as might be necessary, also, 10 drops tr. of iron, three times a day, from which she slowly improved.

Oct. 17th. Again called to see Mrs. R. She has had another chill to-day—in fact, has been a good part of her time confined to bed since previous attack. Examined spine again, and now found it very tender at several places, particularly over the dorsal vertebræ. Patient informs me that always, for the last four or five years, after being sick five or six days, the soreness of her back is often so great that she cannot lie on it with ease. Gave a dose of oil, and applied the blister as above.

19th. Blister has drawn well; slight fever, but no chill.

21st. Patient much better in every respect. Ordered the application of the blister to the other side of the spine, on to-morrow, and to be kept running as long as possible.

25th. Discharged.

Nov. 5th. Mr. R. informs me, to-day, that Mrs. R. is quite smart—able to be up and about; feels more like she is well than she has for a great while; has had no chill since blistering.

It will be perceived that, in this last attack, this patient took no quinine, not that I object to the moderate use of it, in such cases; but rather because I wished to give the blistering a fair trial.

CASE 4th. Oct. 10th, 1845. Mr. M. brought a negro man (aged 24,) to me to be examined. He informs me that his boy has been under the care of an intelligent physician for the last six months, has taken a vast deal of medicine, and instead of getting better is on the decline. I found him laboring under the following symptoms—red tongue, but moist; red eyes; bowels rather loose than otherwise; discharges from the bowels of a rather thin, whitish appearance; appetite bad; cannot rest at night; pains shooting through the breast, bowels, arms and legs; very much emaciated; quick weak pulse; spine more or less tender from the second cervical vertebra down to the fourth dorsal; third lumbar vertebra quite painful under the slightest pressure.

Believing that this patient had been taking such remedies as the more prominent symptoms of his case indicated without any benefit, and it being a chronic case, and since I had now become a strong believer in Spinal Irritation, I concluded nothing could be lost by applying the blister, and awaiting its effects, for a few days. In this case the blister was five inches broad, and was placed over the spine instead of to the side of it. On the 14th (just four days) there was evidently a favorable change. All the shooting pains had subsided; rests well at night; appetite improved. 18th, still give no medicine; tongue and eyes of the natural, healthy, color; bowels more regular, and operations of a good colour, and healthy consistence.

20th. Gave Carbonate of Iron to be taken freely as a tonic.

27th. Able to do jobs about the yard, without the least inconvenience. From this time on, he continued to improve till the 15th of December when the medicine was discontinued.

It may be necessary to mention, that, the blisters were repeated several times, and that he took nothing but the carb. of iron, and an occasional dose of castor oil, during the whole time.

These are a few cases among hundreds of others in which I have witnessed the most astonishing effects from blistering the spine. In intermittent and remittent fevers, where they do not yield to the ordinary remedies, and assume an aggravated character, I have never known a blister applied to the spine, as in the above cases, fail in immediately checking, or very materially changing the nature of the case for the better. In all those malignant cases, if we will examine the spine closely, we will almost invariably find more or less tenderness to exist. And he who will make it an invariable rule to examine it, in every case to which he may be called to prescribe, will not only be surprised at the extent to which he will, often, find it diseased, but will be most agreeably surprised at the success of the above practice, if he will adopt it.

I now have in my possession a number of cases of what may be called chronic chills with enlarged spleen of long standing which yielded readily to one single blister, after the quinine had been freely given, with little or no permanent effect. In these cases I have *always* found more or less spinal irritation to exist, and when the cure was thus effected it was permanent; which I cannot say has been my experience with the quinine.

It would indeed be useless here to enumerate the vast amount of disease that I have cured by blistering, or otherwise irritating the

spine; and I do hope that medical gentlemen, generally, will give more attention to this subject than it has unfortunately hitherto received.

---

ARTICLE XVII.

*A Case of Cauliflower Excrescence of the Os Tincæ, cured.* By  
FRANKLIN BRANCH, M. D., of Abbeville, S. C.

If the following account of successful treatment, in a case of cauliflower excrescence of the womb, can subserve the cause of humanity, by casting one flickering ray upon the science of medicine, the end designed in communicating it will have been accomplished.

On the 24th of May, 1844, being called to visit a female servant of Col. M——, I found her exhausted and fainting, from supposed uterine hemorrhage. Five weeks previous to my visit, she had been delivered of a living child. Her midwife was also a female servant, from whom I learned, that the patient had for many months been laboring under a discharge from the vagina, at times bloody, but generally watery and tolerably copious. When taken in labour, the old servant who acted as midwife made an examination per vaginam, and, as she expressed it, “found a great lump there, which she had to tear away, to let out the child.” This laceration was followed by a profuse hemorrhage, which ceased with the birth of the child.

After delivery, the patient was laid in an easy posture, and suffered but little from hemorrhage until the night on which I made my first visit. I examined per vaginam, and with the finger, detected a large tumour, growing from three-fourths of the circumference of the os uteri. It had a smooth or glossy feel externally, but upon pressure it felt somewhat granular, and evinced a strong tendency to hemorrhage.

A thorough, but sad experience, gained from two previous cases of cauliflower excrescences, (both of which terminated fatally,) enabled me to detect the nature of the disease.

I gave the patient anodynes and astringents, internally, introduced the tampon, and directed cold applications to the loins, and left for the night.

On the day following I visited her, and, by the aid of a speculum, I discovered a tumour, as above described, attached by a broad base to



the os uteri, of an oval form, with an uneven surface, of a bright red color, as large as an apple of ordinary size. It gave no pain on pressure, but was easily made to bleed.

The patient, who had been healthy a year before, was now exceedingly weak and emaciated.

Although the disease was considered incurable, by most of the authors which I had consulted, I believed differently, and acted upon that belief. Aided by the speculum, introduced and extended, I passed a ligature of catgut around the base of the tumour, as near the os uteri as possible, and, bringing it through a canula, fastened it. The ligature was tightened every twelve hours, until the tumour was removed.

After the removal of the tumour, and cleansing the orifice, I discovered, by the aid of the speculum, that a portion of the diseased surface remained. To this surface I applied the nitro-muriatic acid, upon a pledget of lint attached to the end of a stick, passing it through the speculum, by which means the cautery could be applied to any particular point, without injury to parts adjacent. No pain was complained of upon the application of the acid, and no subsequent treatment prescribed, except tepid injections per vaginam occasionally, and an occasional dose of neutral salts.

After four days, another examination was made with the speculum, and on discovering a small point of diseased surface remaining, the cautery was again used, and the simple plan of treatment continued.

After six days, another examination was made, and not a vestige of the disease was there. The os uteri presented its natural appearance, with the exception of that purplish color always present in a cicatrix recently formed. Six months passed away, another examination was made with the speculum, and perfect health was restored to the diseased organ. The system was invigorated. I saw the patient, ten months after the cure was performed, laboring in the field as faithfully as another hand, asserting that she was perfectly restored.

---

PART II.—REVIEWS AND EXTRACTS.*Medical and Surgical Reports from the Army in Mexico.*

Denied, ourselves, being participators in the active and interesting campaign in Mexico, we have made every exertion to obtain medical news from those who have been, and are now, engaged in this foreign service. If as yet we have derived nothing direct from the scenes of operation, it is not our fault; and to supply the omission of our promised correspondents, we publish below what we have derived from the sources credited. We are still without the New-Orleans Journal for March, and may derive more recent information from it, should it come to hand in time.

Of Dr. Jarvis' report, we make this comment. Of the three Divisions of the Army attacking and capturing Monterey, commanded respectively by Generals Twiggs 1st, Worth 2nd, and Patterson 3rd, (volunteers); in the 1st and 3rd, there were 24 amputations, while in the 2nd there were only 4. Does not this indicate plainly where the fighting was done—and yet Gen. Worth is alone looked upon as the hero of the taking of that city, and he alone has been rewarded by the President with a brevet. Has no injustice been done Twiggs of the regulars, and Patterson of the volunteers?

---

*The Diseases of the Army of Occupation in the Summer of 1846.*  
By H. R. ROBARDS, M. D., of Memphis, Tennessee.—(Western Journal of Medicine and Surgery.)

The following abstract from notes taken while the writer was acting as Surgeon to a regiment of volunteers from Tennessee on its march to Mexico, and during a few weeks while stationed at Matamoras, is presented to the profession, in the hope that its details will be found interesting and useful. The notes were penned in camp, and my short military experience has taught me that the camp is not a place for easy or finished composition.

As early as May last, in anticipation of a call for volunteers for the war then just breaking out with Mexico, the stirring notes of the fife and drum were heard in Memphis; in a few weeks, five companies were made up, and remained in organization until the final lots were drawn in June, when only three were admitted into service.

The requisition made upon Tennessee was for three regiments—two of infantry, and one of cavalry; the latter, to which I was attached, was ordered to rendezvous at Memphis by the 15th of June, or as soon thereafter as possible. This regiment consisted of three companies from East, five from Middle, and two from West Tennes-

see. I am particular in locating the different companies, in order to show the varying influences of a southern climate upon constitutions from different sections of the State.

Three companies only had arrived at Camp Carroll, the place designated for the encampment, two miles east of Memphis, on the day appointed; on the 24th of June, the whole number were there; and on the 27th of July, we took up the line of March for Mexico; the entire distance about fifteen hundred miles, to be travelled by land.

Our camp near Memphis, so far as could be observed, was free from local causes of disease; the situation was elevated, and both men and horses were furnished with excellent water from a single large spring. The weather, during a greater portion of the time, excessively warm and dry, and the roads and whole encampment disagreeably dusty. For the first three weeks after the arrival of the troops at this place, we had little else, in the way of disease, to contend with but diarrhoea, intermittents, colic, etc., brought on chiefly by exposure and imprudence in diet. The companies from West Tennessee, being acclimated, suffered least; two-thirds of the men from other parts of the State, were attacked with one or the other form of these diseases soon after their arrival. The treatment was simple, and only varied with the cause. If diarrhoea, and the cause imprudence in diet, a dose of castor oil relieved most of them; if it did not, broken doses of calomel, ipecac. and morphia invariably put a stop to it. This was a favorite combination with me in this disease, and throughout the entire march never failed, when the patient could be restrained in his diet. The cases of intermittent fever were cured with equal certainty by administering *two doses of quinine, of ten grains each*, one given six hours before the chill, and the other two. As colic was often brought on by gorging with indigestible food, emetics were frequently administered, and gave instant relief. If the indications did not call for this remedy, calomel and opium, followed by a brisk purgative, were given; and if, as is often the case in this disease, an operation could not be procured in time by purgatives, then I had recourse to an expedient which with me has never failed, and I have used it in numerous cases of obstruction from various causes: this is forcing large quantities of lukewarm water into the intestines by injection. If the obstruction is caused by impacted fæces, the water reaches them, they are moistened and pass off. If it be partial hernia, as I have known in one instance, where a knuckle of the intestine is retained in the internal ring, the gradual and powerful pressure of the water draws the bowel out, straightens it, and thereby removes the obstruction. I have often been astonished at the immense quantity of water that can be forced into the bowels without the slightest injury to the patient, but often with the effect of affording instant relief.

About the 20th of June a most troublesome camp disease broke out. I refer to measles, which, notwithstanding every precaution that could be used, remained among the men for three months; there



were not less than three hundred and fifty cases of the disease, and yet all recovered. The treatment adopted was chiefly expectant. Sometimes the patients took stimulating diaphoretics, and often during the march drank freely of hot whisky toddy, even while the fever was on, without any bad effects that could be perceived; *purgatives were decidedly injurious in any form*. Diarrhœa, which often occurred as a sequel to this disease, was sometimes obstinate, but yielded to external irritants, mucilaginous drinks, anodynes, etc.

About the first of July, a few cases of continued fever occurred in camp; but they were confined to one company, which was stationed in an elevated part of the encampment, and in which the usual degree of cleanliness was observed. This company was from a region in Middle Tennessee noted for its insalubrity; two of these cases proved fatal, in consequence, I believe, of the dread of the hospital that existed in that company, which deterred the men from calling for medical aid until the disease had made considerable progress. The brain was the organ that suffered most, delirium being a constant attendant. The treatment consisted of cold applications to the head, blistering, alteratives, etc. One fact I observed in the management of this fever, which strikes me as worth recording; that is, that *quinine invariably aggravated all the symptoms*. If experience should prove this to be always the case, will it not go far to prove that the cause of intermittents and remittents differs from that of continued fever?

During the time we were at Camp Carroll, the companies from East Tennessee suffered most from diarrhœa, colic, and such other diseases as are brought on by exposure and imprudence in diet, their constitutions seeming as yet to resist the causes of fever in any of its forms. It will be remembered that East Tennessee is for the most part a high, broken and healthy section of the State. In the companies from Middle Tennessee there were many cases of remittent fever, at the same time that diarrhœa, colic, etc., were common. The two companies from West Tennessee suffered but little from any other disease except intermittent fever.

From the close proximity of the camp to town, and the freedom with which soldiers, when unrestrained, are known to indulge in every kind of dissipation, the number of cases of syphilis and gonorrhœa which I have to report will not seem extravagant, namely: twenty-three of the former, and eighty-four of the latter.

The first stages of syphilis were treated with calomel in combination with sarsaparilla; without waiting for the gums to be touched, this form of mercury was laid aside after a few days, and the cure completed by giving in full doses the proto-iodide of mercury, and sometimes the hydriodate of potassa. The latter was always used when the gums had been previously touched with mercury; dry lint or calomel was applied to the chancres, and iodine ointment to the buboes. The patients generally recovered in a few days.

Gonorrhœa was treated with equal success, by administering two

parts of the comp. extr. buchu and one of balsam copaiba in tea-spoonful doses three times a day, in the first stage: in the second, that is, after using the above four or five days, injections of a strong solution of nitrate of silver or acetate of lead were employed, and generally affected a cure at once.

On the 20th of July, our encampment was changed to the bank of the Mississippi river opposite Memphis. After this, we had but one or two cases of continued fever, while the intermittents and remittents assumed a much more malignant form.

But before I proceed farther, it may be as well to state that a little upwards of a thousand men, either belonging to or in some way attached to the regiment, came under the surgeon's care; out of which number, on the 4th of October, there had been more than twelve hundred cases reported. Of course, some of the men were several times on the sick list; but the case was never reported unless it was a different disease from the one previously treated; relapses were never reported the second time. This regiment, as I have before mentioned, consisted of volunteers from different sections of the State, of various professions and callings; many were educated gentlemen; many belonged to the respectable class of farmers and mechanics, and not a few were loafers. With all, the habits, customs, diet, etc., of a camp life were different from what they had before known. The sickly season was just approaching when they arrived at Memphis; the country through which they traveled was one of the sickliest in the United States. Is it wonderful, then, that so large a number of cases should have occurred? Is it not astonishing that only five had died up to the 4th of October, when I temporarily left the regiment? It will be admitted that this success was almost if not entirely unprecedented, and I attribute it greatly to the efficacy of a single remedy, quinine. This was our sheet-anchor, and, without it, my opinion is that our regiment, now by far the largest and most efficient in the service, would have been completely disabled.

From the accumulated experience of the profession, it is clear that quinine acts in some manner specifically upon the nervous system, producing, as I have lately seen, when given at improper times and in over doses, complete derangement of that system. May this not throw some light upon the vexed question as to the organ primarily affected by the remote cause of fever? If quinine cures fever, and the action of the article is specifically upon the nervous system, does it not follow that the cause of fever must act primarily upon that system? But I return from this digression to my notes.

I mentioned before that the remittent and intermittent fevers assumed a more malignant form on the bank of the river, but did not state that diarrhœa almost entirely disappeared from the camp, except when induced by drastic purgatives, which was so common an occurrence that we had to guard scrupulously against their use.

The symptomis that ushered in intermittent or remittent fever

were very similar, and such as usually occur in that section of country. However threatening the premonitory symptoms might be, it was not often the case that medical aid was called for until the patient found himself shivering with a chill; then he was let alone until the stage of excitement passed off. If at this time the tongue, skin, etc., indicated a very disordered state of the secretory organs, a mercurial in some form, in combination with a gentle purgative, was given during the sweating stage; the kind of purgative to be given was always suggested by the nature of the case, the constitution of the patient, etc. Very often, indeed, they were not used at all, and the cure proved equally effectual. We usually commenced with the quinine eight or ten hours before the chill ought to return; ten grains were given, and repeated four hours afterwards; the third dose was given or not as the case seemed to require.

Ten grains of quinine I regard as a maximum dose, *if to be repeated*. I however frequently gave as much as thirty grains; but it was always when the case was seen for the first time a few hours before the chill was expected, and it constantly kept it off. I prefer giving the remedy in ten grain doses, for the reason that its effects are always certain and it acts more effectually upon the skin, and not so frequently as an emetic as when given in larger doses. My manner of giving it was simply to mix it with water. To some this is a bitter, nauseous dose, and caused vomiting at once; then it had to be made into pills, but I think the solution much more effectual and rapid. The doses I have mentioned invariably put a stop to the chill, whether simple or malignant; but to guard more certainly against a return, we usually ordered five or ten grains, according to circumstances, every morning for three or four days. If, after the chill was checked, the secretions remained vitiated, an alterative was given at night, and repeated if necessary.

The cases of remittent fever were treated differently, and it is in the treatment of this disease that quinine is most frequently abused. It is very much the custom in the South, at this time, to administer quinine in all the stages of fever and in large doses. My experience justifies me in saying that such a course is not only unnecessary, but altogether unjustifiable. In my opinion, quinine should never be given unless the remissions are very distinct, and *never in the hot stage*. I usually, in this form of fever, commenced the treatment, after the first exacerbation had passed off, by administering a gentle purgative, in combination with some article that would keep up an action upon the skin without irritating the stomach and bowels. Ipecacuanha generally answered the purpose remarkably well. Most frequently the combination was of calomel and ipecac., given in broken doses, which course, varied as circumstances required, was kept up for two or three days, when the remissions usually became more distinct, and quinine had the effect of arresting the disease. These cases rarely continued on hand longer than four or five days.

There are some other diseases which many southern physicians



regard as having a malarious origin, and treat indiscriminately with quinine; I allude more particularly to dysentery and diarrhœa. Now, I have not found such practice judicious, but, if I mistake not, have seen very injurious consequences result from it. But when these diseases assume, as they sometimes do, a periodical form, then quinine, in combination with morphia, is the remedy. I should never recommend it in these diseases unless they did assume such a form. This combination I have found exceedingly useful in the treatment of other diseases attended with the nervous irritability very common in the fevers in the South. The fevers on the Rio Grande at this time are so constantly attended with disordered stomach and bowels, that the morphia is indicated in almost every case requiring quinine. •

As I before observed, our regiment took up the line of march on the 27th of July. We were under the necessity of leaving twenty-five sick men at the hospital in Memphis; most of them, however, were convalescent and followed in a few days. The direction of our march was a little south of west, passing entirely through Arkansas from north-east to south-west, and through the whole of Texas in the same direction. A geological and topographical history of this country would be a valuable and interesting work. My duties in another capacity were too arduous to allow much time for such investigations. From Memphis to Little Rock, the capital of Arkansas, the road passes through a low, flat, marshy country, pregnant with local causes of disease; and our troops suffered more, perhaps, in performing that distance of one hundred and fifty miles than on any other portion of the route. The weather was excessively warm, the roads dusty, and the water disgustingly bad; this was felt most severely in the Mississippi swamp, a distance of forty-five miles. Here, exposure to the sun, bad water and imprudence in diet brought on many cases of severe diarrhœa; the form of fever was principally malignant intermittent. I found it necessary not only to give as much as thirty grains of quinine at a dose, but to assist it with stimulants, external irritants, etc. Congestion was the symptom most to be feared, and there was no time to "prepare for quinine;" it must be given at once, and boldly given, or the patient was lost. It is astonishing how soon the worst cases recovered. Our conveniences for transporting the sick consisted of an ambulance fixed upon springs, and as many common wagons as were required. A great many preferred remaining on horseback, on account of the closeness of the wagons and the extreme heat. Measles on this account gave us much trouble; but notwithstanding all these inconveniences, we arrived at Little Rock in good time and without the loss of a man.

On this route an accidental case of surgery occurred, which, from its novelty in one particular, may be worth mentioning: A soldier, in taking a carbine from among some bridles, accidentally discharged it, the ball taking effect upon his comrade, who was standing so near that his clothes were set on fire. It entered the anterior inferior

part of the axilla, ranged upward, and passed out at the anterior edge of the scapula. Not being near at the time myself, the assistant surgeon, Dr. Washington, examined and dressed the wound. He reported to me that he thought the ball had passed above the axillary artery, fracturing the humerus at the head or neck. I had only time the next day to make a superficial examination of the wound, which I did without taking the bandages off. I discovered that the bone was evidently fractured, but at what point I could not determine, in the situation in which the arm then was. Dr. Washington was left in charge of the case, and reported to me, a short time afterwards, that on a more minute examination, he had discovered that the humerus was fractured, not at the head or neck as he had at first supposed, but three or four inches below, near the insertion of the latissimus dorsi and pectoralis major muscles; the axillary artery had remained uninjured, and could be distinctly felt pulsating when the finger was introduced into the wound. Suppuration was free, and the wound healed about the time that the bone united. In this case, the ball passed below the artery, but what broke the bone so far from the place at which it entered I do not clearly perceive; there was no fall or jar of any kind except that made by the ball itself.

At Little Rock we remained five or six days, recruiting; here the diseases assumed a milder form, intermittents being most common, and on the whole the number of cases was considerably diminished. Our march was now through a high, broken country, to Washington, in Arkansas, a distance of one hundred and twenty miles. The health of the regiment continued to improve until we crossed Red River, at Fulton, and encamped upon the edge of the swamp. Here my notes show a large increase in the number of cases of malignant intermittents and remittents, requiring even a more vigorous treatment than before. Congestive fever, in its worst form, prevailed at this time; remittents were also more obstinate, and required a more liberal use of mercurials. As the sick had to be hauled, these were given invariably at night, and in every case of fever where there was a remission, quinine was given in the morning, and repeated once or twice if necessary, regardless of the effect of the purgative given the night before. The condition of the bowels was attended to after the fever was broken, and quinine would do this whether the bowels were acted upon or not.

It may be worthy of remark, and I noticed it in a hundred instances, that though intermittent or remittent fever often preceded measles, it never accompanied or succeeded it during the march; diarrhœa, on the contrary, almost invariably followed it. The number of cases of fever occurring during the march through Texas was immense; this may be attributed in a great measure to exposure to the rays of an ardent sun during the day, and encamping upon the marshes and swamps of creeks and rivers at night. In the prairies, the heat of the sun was most intense, and was especially oppressive to persons from the North.

About the first of September, many cases of jaundice occurred; this was often though not always preceded by an attack of fever. The complaint was never serious, but excessively annoying to the patient, in consequence of the languor and general feeling of indisposition which it induced. It was almost invariably accompanied by a ravenous appetite. An emetic was given in the onset of the disease; this was followed by a brisk purgative, and then vegetable tonics were relied on to effect the cure. This course I persevered in for some time, but the cases did not recover as rapidly as we like to see them in the army. Another remedy must be sought for, more certain and rapid in its effects. Iodine struck me as coming nearer to fulfilling all the indications than any other I could think of, particularly the proto-iodide of mercury. This was given in the form of pill, in combination with rhubarb and aloes, twice a day, each dose containing two grains of the proto-iodide. My expectations were more than realized; indeed, it acted like a charm, and I had no further trouble with the disease.

I have now in a hurried and rather superficial manner referred to all the diseases we had to contend with in large numbers; of course there were many other isolated cases of rheumatism, dropsy, neuralgia, paralysis, etc., which recovered under the usual treatment. In giving the treatment of the different diseases encountered, I have left out all such remedies as are used merely as auxiliaries, and confined myself to such as were mainly relied on. Indeed, on a march through a wild country like that through which we passed, where both sick and well had to move at the sound of the horn in the morning, there was no time nor opportunity allowed for dealing in those minor remedies, so often used in domestic practice, more with a view of amusing the patient than with a hope of benefitting him.

Three deaths occurred on the road, one from each section of the State. No perceptible difference could be observed in the number or violence of the cases in the different companies after getting fairly into a southern climate, for there cannot now be found three men from any company who have not been under the care of the surgeon.

At Lavacca, a small town on the Matagorda Bay, now used as a depot for one division of the army, the regiment remained stationary eight or ten days; here my own health became so feeble that I obtained permission to go on to Matamoras by water. On the first of November the troops crossed the Rio Grande, and encamped on the bank of the river five miles above town.

Here the diseases have been chiefly of an intermittent form, accompanied in almost every case by gastric and intestinal derangement, and, owing to this, more difficult to treat than heretofore. Quinine alone almost invariably vomits; but rarely ever does so in combination with morphia, particularly if the precaution is used of applying a mustard plaster over the epigastric region at the time it is given. Owing to the frequent changes in the weather, relapses often occur, and the stage of convalescence is always protracted. Mercurials are often indicated, and are used with great advantage.



---

*Abstract of a Letter from Dr. N. S. JARVIS, Surgeon U. S. Army, dated Monterey, Mexico, Oct., 1846, embracing several Surgical Cases, which fell under his Treatment and Observation.—(N. York Journal of Medicine.)*

After stating matters of a private nature, Dr. Jarvis continues:—  
“On the 19th of September we encamped within four miles of Monterey, in a grove of Peccan trees, called ‘Walnut Grove,’ where we were abundantly supplied with clear and cold water, from a stream of considerable size, and rapidity, formed by the junction of numerous springs, which took their rise in the surrounding lime-stone rocks. The combination of wood and shade rendered this spot admirably fitted for an encampment. On the following day parties were employed in reconnoitring the enemy, and in observation of the fortified position of the town. Towards evening my Regiment, 3d Infantry, with another, were advanced a mile towards the town, to cover a party of engineers, engaged in the erection of a Mortar Battery, but returned to camp about 9, P. M., having been relieved by another regiment.

On the morning of the 21st the whole division was thrown forward towards the city, with a view, as we supposed at the time, of making a diversion in favor of the 2d Division, under Gen. Worth, which was moving on the western side of the city by the Saltillo road. Few of us supposed, as we silently marched along, occasionally passing through cornfields and by the side of hedges, or whatever could conceal our movements from the enemy in their batteries, that we should so shortly be engaged in a fierce and deadly strife. As soon as, or in fact before, we emerged from under cover, the batteries from either end of the city opened their fire upon us, completely sweeping the plain in every direction, and enfilading the advancing columns of our troops, now rapidly marching towards the suburbs. The engineer officer having reported the practicability of attacking with success the rear of some of their forts, the 1st, 3rd, and 4th Infantry were ordered to advance rapidly by separate roads, and now it was my professional labors commenced; the nearest and only shelter that presented itself to me for the wounded, falling every moment under a most destructive fire, was a quarry pit, four or five feet in depth, and the same in breadth. Several of these were contiguous, and to them I directed the wounded to be carried. By stooping we were protected from the shots, which, however, became every moment thicker, owing to the fact, that our troops had by this time advanced within range of the enemy’s fire, and the moment they perceived a party of men bringing the wounded to us, they directed all their guns upon it. I had already performed one amputation, and was preparing for a second, when two or three fugitives rushed into the pit, falling over the wounded that lay there crowded together, saying that a large body of lancers were approaching. So little credit did I attach to their report, which I ascribed rather to their fears than the

actual presence of this dreaded description of troops, that I never raised my eyes to observe them; which circumstance doubtless saved us all. Had I been discovered, all would have been massacred, as in their headlong fury, they would neither have delayed to ascertain our character or profession, nor have paid much respect to our patients. Several soldiers who had sought an adjoining pit with an officer were slain. They were soon after repulsed by a regiment of Ohio and Mississippi Volunteers, marching to reinforce those already in the town, and their retreat was farther quickened by a shower of grape opened upon them by our artillery.

I commenced with a determination of giving you a surgical history of the actions of the 21st, 22nd, and 23rd September, but have unintentionally thus far given a military narrative. This, however, will show, in the incidents above narrated, that the military surgeon is at times somewhat unpleasantly situated, when in the discharge of his professional duties, deprived as he is of the security, and many of the appliances enjoyed by his fellow practitioner in civil life.

The first wounds were received in crossing the plain, and were inflicted by grape and cannon-shot. This was of course before we had approached within reach of their musketry. These wounds were all low: generally at, or just above the ankle, according to distance and direction. Of the first three men brought to me, two had received wounds from twelve pound shots just above the ankle, which had nearly severed the limbs, which were hanging only by a portion of integuments. The other had his heel torn off by a six pound shot. Shortly after, our troops having advanced within reach, and under the fire of the Mexican Infantry, numerous cases of wounds by musket and escopette\* balls were brought to me; these latter are one-third larger than our musket-balls, and consequently inflict a more severe and formidable wound. So numerous at this time became the wounded in our pit, and so constant and heavy the fire, directed towards the parties approaching with the wounded, as to compel us to remove our hospital several hundred yards farther in the rear. We had not long been in our new position, when some covered wagons bringing the wounded attracted the attention of the enemy, who immediately re-opened their fire, compelling us a second time to remove beyond the range of their shot.

Among the numerous projectiles, occasioning severe and fatal wounds, were grape, canister, fragments of iron and copper shells, and stones knocked by the balls from the buildings and walls. Their shells were thrown with great accuracy, frequently in the midst of a body of troops, but fortunately killing and wounding but few.

Before speaking of any particular wounds, I will here take occasion to make some remarks respecting the character they assumed, and the peculiar causes acting to prevent a favorable result, so far as

---

\* An escopette is a short carbine, similar to a blunderbuss, and carries a ball one-third larger than our musket.

---

regarded the healing of all, even the most slight. The first annoyance we experienced, and which no doubt exerted an injurious effect, was one little anticipated at the time. The moment a limb was amputated numerous flies would alight on the stump, and must have deposited their eggs, for when it became necessary to dress the stump, myriads of maggots were found buried in it, which could be expelled with great difficulty; rendering it necessary in some instances to re-open the flap, for their complete extermination. A much more formidable enemy made its appearance in an erysipelatous inflammation of the integuments, covering the stump, which generally set in two or three days after the operation; and notwithstanding all the means made use of to arrest it, most commonly ended in sloughing, and either proved fatal or rendered a second amputation necessary. That some influence existed previously, either external or internal, from causes connected with the state of the atmosphere, or habits of the men, arising from diet or water, was manifest. The slightest wound or scratch became in every case a tedious ulcer, in some instances proving a cause for serious alarm. Apparently the most trifling wounds required an unusual time for healing, and even those that had previously healed would break out again, and present greater difficulty in their cure than in the first instance.

At this period no atmospheric causes apparently existed to produce this unfavorable aspect of things. Nothing could exceed the loveliness of the weather, if I may so express myself, and if the middle of the day were warm, the morning and evening refreshed us by a most delightful temperature and cloudless sky. No rain had fallen, with the exception of one or two showers, for nearly 2 month, and consequently little moisture existed to produce its well-known morbid influence. Immediately after the capitulation of the city, on the 25th of September, all the wounded of the different divisions entered the town, and suitable buildings were provided for their accommodation. Upwards of two hundred officers and men from the 1st and 3d Divisions, who had been most severely wounded, were conveyed thither on the same day in litters and wagons. The wounded of the Second Division already occupied the city.

Our camp afforded no comfort nor shelter for them beyond a few small tents and a solitary blanket laid on the ground: and many were destitute of even this apology for a bed, having lost them on our march. Many had no other clothing than that in wear, which was not only torn and soiled in climbing over the hedges, walls, &c., during the battle, but was stiff and saturated with blood from their wounds. A few days after their reception into the hospitals, tertian intermittent fever made its appearance, attacking many of the wounded, and in a majority, retarding or completely arresting convalescence. On many of those severely wounded it exerted a decidedly pernicious influence, and no doubt contributed, in some cases, to a fatal termination. It not only attacked the wounded in the hospitals, but prevailed extensively in camp and among the popu-



lation of the town and neighboring country. I cannot say to what extent, this may be attributed to the putrid exhalations arising from the numerous bodies of men and horses slain in the different combats, and which had been slightly covered with earth, and emitted a most sickening and offensive effluvia. This, doubtless, contributed largely towards infecting or destroying the purity of the air, and establishing a poisonous miasm.

With these preliminary remarks, I will now give you an outline of a few of the most interesting cases resulting from gun-shot wounds, received during the three days' attack on Monterey, and which came under my observation at the time. With a view to some order and classification, I will describe first those of the head and face.

CASE 1. Corporal Sherridan, 1st Infantry, was struck by a musket-ball on the anterior and central portion of the *os frontis*, destroying it for a distance of two inches. Considerable portions of the brain issued from the wound, and notwithstanding the severity of the case, the patient appeared to suffer little or none until the third or fourth day, when, coma supervening, followed by delirium, he died.

Numerous wounds of the scalp, accompanied in three cases by destruction of the periosteum and outer table of the skull, came under my observation, but presented nothing new or different in their character and progress from ordinary cases.

CASE 2. Private Redville, of the 3d Infantry, in passing a stone wall, received a wound in the right eye, as he supposed, from a fragment of stone broken from the wall by a cannon-ball, and which struck him with force sufficient to knock him down. I saw him two or three hours after the injury was received, and found his eyelids so much swollen, as to render it very difficult to ascertain the condition of the eye itself. In placing my finger over the inner canthus, I felt a sharp point, apparently of some hard substance. This I immediately extracted with a pair of common forceps, and found it to be a fragment of grape, three-quarters of an inch in length, and one half an inch in width at the centre, of an oblong or elliptical shape. It was of copper, or an alloy of that metal, and had evidently been broken off by striking the wall. On examining the eyeball I found it uninjured, the fragment having passed between it and the inner canthus, and penetrated to the posterior wall of the orbit, destroying the lacrymal sac, the *os unguis*, and wing of the sphenoid bone. Considerable inflammation and suppuration followed, and although at the present time the wound has entirely healed, the pupil remains permanently dilated, and vision destroyed. This seems to indicate an injury of the optic nerve, which the missile from its length must have reached and destroyed.

CASE 3. Private Jones, of the same regiment, was wounded about the same time by a musket-ball striking him near the angle of the inferior maxilla, on the right side, fracturing the bone, passing directly through the tongue and the corresponding portion of the bone on the opposite side. The tongue was completely severed at its base,

hanging only by a few muscular fibres. The patient was almost moribund when brought in, and died shortly from excessive hæmorrhage.

CASE 4. Major L., commanding the 3d Infantry, received a wound from an escopette-ball directly in the centre of the upper lip. The ball passed obliquely backwards and to the left, tearing away the bony palate, and completely destroying the upper maxilla and malar bone of that side, and fracturing the condyle of the inferior maxilla, passed out behind the ear near the mastoid process. The velum pendulum palati was completely separated from its superior connections and rested on the tongue. The whole of the alveolar process, together with the teeth on the left side, was carried away. To enable him to articulate, as well as swallow, I contrived to fasten up the pendulous palate by a stitch, and afterwards by a ligature around the remaining incisor tooth, with a view of afterwards endeavoring to effect a union with the parts from which it was torn. I subsequently secured it more completely by a strong ligature passed through it in two places, the ends being brought together, and by means of a probe carried up through the nostril and fastened with adhesive plaster to the forehead. Intense inflammation followed, involving the whole side of the head, and during several days pieces of bone were being constantly separated and discharged. The previous ill health of this officer rendered his case the more unpromising. He had suffered for two or three years from severe and repeated attacks of Asthma, which had so enfeebled his general health that the least exposure or fatigue was attended by intense suffering and danger of death. Up to the present time nature has made but little recuperative effort, in consequence perhaps of an attack of intermittent fever, which, in many cases, thus acts in retarding the healing process.\*

CASE 5.—A private of Col. Hays' mounted Texan Rangers was wounded on the 21st in an attack made on the eastern side of the city. A copper grape-shot striking him at the same point as in the preceding case, passed obliquely backwards and downwards wounding the tongue and fracturing the lower jaw on the left side near its angle; then coursing along the neck, beneath the integuments and muscles, lodged near the insertion of the left sterno-cleido mastoid muscle into the clavicle, where it was cut out. Fragments of bone came away, and considerable inflammation, with difficulty of swallowing, followed, but the wound progressed favorably, and notwithstanding the size of the shot and destruction of parts, is at the present time nearly healed. His head is considerably drawn down, and a rigidity of the jaw, with inability to speak, remain.

CASE 6.—The sergeant-major of the 5th infantry was wounded on the 22d, the ball entering near the same point as in the two former cases, but passing obliquely backwards and upwards above the roof

\* This officer died a few days afterwards.—M.

of the mouth, and lodging near the articulation of the jaw on the right side, between the coronoid process and masseter muscle. It was subsequently extracted, and the wound at the present moment has entirely closed, leaving, however, as in the former case, more or less immobility of the jaw.

CASE 7.—Private Lewis, of the 1st Mississippi Regiment, was wounded on the 22d September. The ball struck him at the lower point of the lobe of the ear, and posterior edge of the ramus of the inferior maxillary bone on the left side. After fracturing this bone midway between its angle and articulation, the ball passed transversely inwards, tearing away the back part of the palate, and came out through the right malar bone. This case progressed favorably, and the wound at the present time is nearly healed. Some deformity, arising from ossific matter thrown out in the union of the jaw, and a certain degree of immobility remain. The close vicinity of the carotid artery to the point of entrance of the ball, and its entire escape from injury, renders this case doubly interesting.

The next order of wounds are those of the neck, thorax and abdomen, many of which, of an interesting character, presented themselves during the engagement, but the limits of my letter warn me I must reserve them for a future occasion. I will, however, describe a few cases of wounds of the pelvis and bladder, presenting some singularity in the direction and force of the balls, and interesting in the nature and result of the injuries they inflicted.

CASE 8.—Lieut. G——, 4th Infantry, was wounded in three places about the same time, on the morning of the 21st September. The most severe wound, however, was one, in which the ball, striking the upper and anterior portion of the thigh, entered the pelvis, wounded the fundus of the bladder, and passed out at the sacro-ischiatic notch. The femoral vessels, in the course of the ball, escaped being wounded in a most remarkable manner. The urine passing freely through the wound necessarily produced considerable infiltration and inflammation of the cellular tissue of the thigh. By changing his position so as to lie on the left side, and introducing a catheter, which was constantly maintained in the bladder, no more urine escaped through the wound, and the inflammation rapidly subsided. No unfavorable symptoms followed. The usual separation of the parts destroyed in the course of the ball took place, succeeded by a healthy suppuration, at the usual period of gun-shot wounds, and a hope was entertained by his friends of his speedy recovery. This hope was still more strengthened when, on the tenth day after the wound was received, the catheter, by some accident, became obstructed, and remained so some time before it was discovered, and on its withdrawal and re-insertion, upwards of *twelve ounces* of urine were drawn off, showing conclusively that the wound in the bladder must have entirely closed, to enable it thus to retain so large a quantity of fluid. The expression of his countenance, and cheerfulness of manner, would hardly have indicated any great pain or suffering. It was only on



the twentieth day that any alarm was excited in the minds of his friends, by his suddenly being attacked by rigors, followed by fever and profuse night-sweats, which, notwithstanding all the means made use of, rapidly reduced his strength, and he expired on the night of the 13th October, and on the *twenty-second* day after being wounded. A post-mortem examination of this case would have proved highly interesting, showing how far wounds of this description, affecting internal hollow organs, may heal, and the manner in which a restoration of the parts destroyed takes place; but the pressure of professional duties at the time has prevented so desirable a finish to the history of the case.

CASE 9.—Private Capers of the Baltimore Battalion, was wounded early on the 21st September. The ball entered directly above the os pubis, and taking a direction downwards and obliquely backwards, wounding in its course the bladder, passed out of the pelvis between the sacrum and tuberosity of the ischium on the left side. It was found lodged between the integuments and glutei muscles, from which point I extracted it. Urine passed freely at the time, from the wound over the pubis, but ceased shortly after the introduction of the catheter, which was constantly maintained in the bladder, as in the former case. Very little tension or tenderness of the abdomen followed, nor any symptoms of peritoneal inflammation, showing that the ball had entered the bladder without wounding the peritoneum.\* Neither were there any signs of extravasation or infiltration of urine, and but little or no febrile action. About the tenth day after its reception the wound over the pubis, which had by this time entirely closed, broke out again, discharging urine, this was shortly afterwards followed by the opening of that in the nates, made for the exit of the ball. Through the latter, both fæces and urine, passed, showing that sloughing had taken place, and a communication formed between the rectum and bladder. The contents of both of these were occasionally discharged from the anterior wound. The patient lingered in this miserable situation until the *sixteenth* day, when he expired, worn out by pain and suffering.

CASE 10.—Private Young, of the 1st Tennessee Regiment, was wounded nearly at the same time and place as the above. The ball entered just above the os pubis, and about one inch to the right of the symphysis. It ranged diagonally across the pelvis, inclining downwards, wounding both the bladder and rectum, and passing out through the left sacro-ischiatic foramen, just above the os coccygis; urine and fæces passed out from both orifices of the wound. When brought in, it was supposed, from his general appearance, that he would survive his wound for a very short time. A catheter was introduced immediately, which was retained with considerable difficulty. The wounds were dressed in the usual manner; urine and fæces

\* The ball entered the bladder below the point where the peritoneum is reflected from the posterior wall of the abdomen upon the fundus of the bladder.

continued, however, to pass out of the wounds, attended by considerable irritation and febrile action. In this condition he lingered *twenty-three* days, when he expired, worn out, as in the case of Capers, by long-continued suffering.

Having given a brief description, of a few of the gun-shot wounds in the different assaults on Monterey, I will conclude my communication, with a statement of the number and results of the larger amputations, performed on those occasions. The total number in the three divisions of the army was *twenty-eight*—viz: *ten* in the first division, *four* in the second, and *fourteen* in the third or volunteer division. *Twenty* were performed on the field, or on the following morning, in the camp; the remaining *eight*, at subsequent periods, varying from five to twenty days. *Twelve* of the number, including *two* in those taken prisoners and operated upon by the Mexican surgeons, proved fatal, and the remaining *sixteen*, have nearly or quite recovered. This average of mortality was not confined to our wounded. I was told by Dr. Hidalgo, surgeon in charge of the Mexican military hospital, that of *thirteen* amputations performed there, *five* had proved unsuccessful, and one case, that had recently been operated upon, appeared to me to be in a critical condition, but whether the patient died or recovered I have not learned.\* In addition to unfavorable causes, not enumerated among those I have heretofore noticed, and from which the Mexicans were happily exempt, was the repeated removals to which our wounded were subjected. In carrying them from the field to the camp, a distance of three or four miles, they suffered greatly; and the subsequent removal to town, still farther increased the pain and danger, and in one or two cases, evidently, was productive of a fatal termination.

With a few remarks, on the appearance and condition presented by the two cases of amputation of the thigh, performed by the Mexican surgeons, in their hospital alluded to above, I will close. One of these had been operated upon on the same day with the injury, and the other some four or five days after. Neither stump on examination, after the removal of the dressings, presented any unusual appearance; on the contrary, the flaps had been neatly adjusted and brought together, and kept so by a number of interrupted sutures and adhesive straps, encircling it in every direction, and adhesion had apparently taken place, in one case along the line of divided integuments. No one judging by the external appearance of the wound, if we except a degree of paleness of the integuments of the flap and some fœtor, would have suspected the condition and extent of disease within. On dressing the first case and removing the lint and adhesive straps, which had become somewhat offensive, the edges of the flap receded or partially separated, so as to reveal a large cavity or excavation, the whole surface of which was dark and ill-conditioned, and from the centre projected the end of the bone. There were no signs or appearances of suppuration or granulation having ever

\* This case subsequently proved fatal.

taken place in the divided muscles; on the contrary, they appeared absorbed or attenuated by previous discharge, of which none existed at this time. The patient rapidly sunk, and died on the fourth day after his admission into the Division hospital.

Private Alexander, of the Baltimore Battalion, the other case, was brought to our hospital some two days after the one above. His stump presented nearly the same appearance as the first, with no indications whatever of the diseased condition within. Eleven days after his admission the flap gave way, disclosing the same appearance as in the former case, with most intolerable fœtor. Gangrene rapidly extended, and he died on the *twelfth* day after his admission, and the *thirteenth* from the time of the operation.

Among other consequences arising from gun-shot wounds, in my hospital, were two cases of traumatic tetanus, both of which proved fatal. The first case manifested itself seven days after the injury, which was a wound of the knee-joint, with a fracture of the patella by a grape-shot. The man was brought from the camp of the 4th Infantry to the Division hospital, and was attacked a few hours afterwards, by opisthotonos, followed by trismus and severe spasmodic action of all the muscles of the body. He died the same night. The other case originated from a gun-shot wound of the left thigh, in which the ball passed down to the femur, six inches below the trochanters, and taking a direction upwards on the outer side of that bone, denuded it entirely of the periosteum for the distance of three or four inches, and was cut out from beneath the gluteus maximus muscle of the same side. Here the first symptoms manifesting an attack of this dreadful disease was violent spasmodic action of the muscles of the injured limb, which soon extended to those of the whole body, followed by trismus and a certain degree of opisthotonos. He expired on the *fifteenth* day after receiving his wound, and nine days after being received from the Mexican hospital; having been taken prisoner and carried thither on the 21st September, the day on which he was wounded.

---

*Remarks on the Medical Topography of Texas, and on the Diseases of the Army of Invasion.* By GEORGE JOHNSON, M. D., late Surgeon in the United States Army.—(St. Louis Medical and Surgical Journal.)

The Brazos Santiago Island, Texas, has become a place of much importance since the present war with Mexico commenced. From May last to the present time, all troops, destined for the "army of occupation and invasion," have been landed at the Brazos, and on account of the difficulties of transportation at the commencement of the war, many of the regiments remained encamped upon the island for several weeks. During the last summer, most of the volunteer



regiments have been stationed along the banks of the Rio Grande, between Matamoras and the mouth of the river. Much has been said in the newspapers, and elsewhere, on the unhealthfulness of this region, but I have not seen the true causes assigned for the great mortality which has occurred amongst our troops on the Rio Grande; I will, therefore, at your request, give you a brief sketch of the medical topography of this region, together with some of the causes which have led to this mortality. Hereafter I hope to see this subject discussed by the medical officers of the army, many of whom have had far better opportunities, than fell to my lot for obtaining correct information on this head, particularly those accomplished surgeons, Drs. Wood and Wells, at Point Isabel, and Dr. Wright and his assistants, at the general hospital at Matamoras.

The Brazos Island, it might be inferred from the many statements that have been made, is particularly unhealthy, from its location. This, I think, cannot be the case. Though a dreary and uninteresting sand-bar, I believe it to be as healthful as Galveston, or any other spot along the Gulf coast. This island is about four miles in length, and one and a half in breadth. It would be almost level with the Gulf, but for the sand hills which line its southern extremity for half a mile. There are some two or three ponds on the island, called on the maps of the country, fresh water ponds, though I found them quite salty on trial. These ponds are situated about a mile and a half from the sand hills, (the place of encampment of the troops,) and to the north. The sea breeze blows almost continually from the south-west, so that no deleterious effects can arise from them. This breeze usually commences about 9 A. M., and continues throughout the night, making sleep delightful and refreshing. By it the sun's heat is rendered less oppressive, and there was not a day so warm, during our stay upon the island, which was during the month of June, as to prevent the men of our regiment from perambulating it from end to end, on fishing and hunting excursions. Here, too, the men enjoyed the pleasure and benefit of bathing. I have understood that the Mexicans considered the Brazos healthy, prior to the arrival of our troops, and I learned from an American woman, a native of North Carolina, who has lived upon the Island for several years, that her family, consisting of six children, had enjoyed excellent health since her residence there. Yet she had occupied, during the whole time, a miserable little shed, only partially covered with ox-hides.

The Mexicans who were taken prisoners at Palo Alto and Resaca de la Palma, were employed in the Quartermaster's department, at the Brazos, and though these men were exposed, day after day, to the heat of the sun, in their labors about the shipping, yet I never knew a case of sickness to occur amongst them. The other employees of the Quartermaster's department, such as teamsters, carpenters, etc., also retained their health, whilst the troops at the same period, were suffering with diarrhœas and dysenteries. I accounted for this circumstance, thus: these teamsters were making daily trips

to the mouth of the Rio Grande, (nine miles,) and they kept their messes well supplied with the excellent water of that river. Besides, they had learned to cook their food properly, and they slept in the dry and comfortable Government storehouses, whilst the troops were lying under tents, upon the wet sand, eating food that was only partially cooked, and drinking the brackish water from the wells that it was almost impossible to retain upon the stomach.

It is known to all military men, and to the profession, that dysenteries and diarrhoeas are camp diseases, and are common to every location where troops are encamped for a few weeks. Our regiment was encamped for about a week at Algiers, opposite New Orleans, and it was very rainy weather during the time; in consequence, dysenteric affections became numerous. At the present time, the troops stationed at Santa Fe are suffering severely with these diseases, and it will not be denied that Santa Fe is a healthy town.

The water used by the troops at the Brazos, is obtained by digging small wells in the sand, usually to the depth of two feet. The water obtained from a well recently made was not very unpalatable, being the rain water contained in the upper surface of the sand, but in a short time the salt water from beneath would be mixed with it, thus rendering the well useless, so that new wells were constantly being made, and as the space occupied by the troops was only about half a mile in extent, and one hundred and fifty yards wide, (in rainy and stormy weather all the rest of the Island being covered with water,) and as this sand hill ridge has been occupied by troops since the 20th of May last, even as many as three regiments have been stationed here at one time, it can readily be understood how the water of this ridge is effected.

The troops that have, from time to time, sojourned at the Brazos, have been for the most part volunteers, and they have had much more to learn than the drill and discipline. They have been compelled to take a few lessons in the culinary art—particularly so far as related to the cooking of pork and beans—a knowledge of which was not obtained until the pains of colic had been experienced more than once. It would be fair to say that the beans of every volunteer regiment are not half cooked, for, at least, the first month of service. Besides, the young soldier is apt to indulge in every excess. He will lie down on the wet ground without his blanket. The old soldier is more prudent—he may drink a little too much whiskey, (if he can get it,) but he will not expose himself unnecessarily to the sun's heat at mid-day, in fishing or hunting. Neither will he eat the coarse and unwholesome food that a recruit will swallow with avidity. The old soldiers of our regiment were the only men who would not indulge in eating red fish, oysters and crabs, whilst on the Island. They were influenced, in part, by the example of the Mexicans, who eschew these luxuries during the summer months.

The country between Matamoras and the mouth of the Rio Grande, is low, with lakes every few miles, between which is interspersed

the chapparel and prairie—the only elevation being the ridge of Burita, upon which the village is situated, and one nearly parallel with it on the opposite side of the river. These ridges, commencing at Burita, extend up the river about a mile. These elevations have been occupied by troops during the last summer, and I can speak for those encamped upon the ridge of Burita, as having enjoyed a good share of health. There was a marked improvement in the health of the St. Louis Legion, after they encamped here. Red fish, oysters and crabs, could not now be obtained. Good water was within reach, and the beans were boiling in the camp kettles at an earlier hour than formerly. Here, too, was felt the delightful and invigorating sea-breeze, but sleep was not so sweet as at the Brazos. Centipedes, (some of them six inches in length,) tarantulas, and other venomous and creeping things, would travel over a man's nose, occasionally, and wake him up before reveille.

Immediately south of Burita, there is a fresh water lake of considerable size, and about half a mile on the opposite side of the ridge there is a salt lake. Fresh and salt lakes may be seen in close contiguity in this vicinity.

The Mexicans in Matamoras, and those who live at the ranchos in the neighborhood are as healthy a looking people as I ever saw. I visited, during the months of July and August last, many ranchos, where I saw children, and I do not remember to have seen one child that had an unhealthy appearance. In many regions of this (Mississippi) valley, during the same months, it would not be surprising to find half the members of every family laboring under remittent and intermittent fevers. The only sick Mexican I saw whilst in the country, (except the wounded in the hospital at Matamoras,) was a woman, with intermitten fever, at Brazos Island. I was afterwards informed by an old Frenchman, who had lived for many years on a rancho near Matamoras, that the fever and ague was the only disease that prevailed in the neighborhood, but that the "chills" were not as severe as those he used to have in Louisiana—here the patient got well in a few days, without, perhaps being obliged to keep the bed.

I have remarked that the Mexicans have, universally, good teeth—an indication, certainly, of good health, and I venture the assertion, that there are as many old people, according to the population, as can be found in any part of the United States. I will further state, that in Matamoras, I became acquainted with several American merchants who had resided in that city for several years. They informed me that the country was healthy—that they had enjoyed better health in Mexico than in the United States. I therefore believe that the great mortality amongst our troops upon the Rio Grande, during the last summer, was owing to the imprudence of the men—the bad cooking—to a neglect of proper police, in most of the volunteer regiments, and to the necessity which compelled the soldier to lie upon the wet ground during a rainy season.

In order to show the number of diarrhœa cases, in comparison with



all other diseases, I will here give an extract from my monthly report of "sick and wounded" for June. The regiment during that month, was stationed at the Brazos Island.

| NAME OF DISEASE. |           |            |                  |                     |         |          |             |             |             |           |         |                        |            |           |        |         | REMAIN-<br>ING. |                   | MEAN<br>STRENGTH.        |       |       |               |        |           |      |        |
|------------------|-----------|------------|------------------|---------------------|---------|----------|-------------|-------------|-------------|-----------|---------|------------------------|------------|-----------|--------|---------|-----------------|-------------------|--------------------------|-------|-------|---------------|--------|-----------|------|--------|
|                  | Diarrhœa, | Dysentery, | Remittent Fever, | Intermittent Fever, | Ulcers, | Catarrh, | Rheumatism, | Ophthalmia, | Erysipelas, | Pleurisy, | Asthma, | Hernia Hemorrhoidalis, | Gonorrhœa, | Syphilis, | Colic, | Wounds, | Total.          | Returned to duty, | Discharged from service, | Dead, | Sick, | Convalescent, | Total. | Officers, | Men, | Total. |
| 170              |           | 9          | 36               | 18                  | 7       | 7        | 6           | 2           | 7           | 4         | 2       | 1                      | 2          | 3         | 8      | 4       | 266             | 229               | 12                       | 1     | 38    | 19            | 57     | 30        | 601  | 631    |

Most of these cases of diarrhœa were preceded by colic, and could be traced to some imprudence in eating. The most successful mode of treatment I found, was to empty the bowels with castor oil, particularly when there was tenderness or pain over the region of the abdomen, and then to administer large doses of opium, 3 or 4 grains, at intervals of four hours, until the bowels were constipated, and, after waiting forty-eight hours to give a dose of castor oil and laudanum. This was the only plan of treatment that was curative. Hyd. cum. cræta., dovers powder, with calomel, etc., were given without success at first. Though the cases of diarrhœa were so numerous, yet we did not lose a man out of our regiment with that disease.

Most of the cases of remittent and intermittent fevers supervened upon diarrhœa. The remittent fevers were of a low form and very obstinate in their character. What retarded recovery, especially in these cases, was a despondent state into which almost every patient sank. After a man had suffered with fever for a week, he either made up his mind to die, or became so dejected that it was almost impossible to persuade him that he would recover, or to rouse his feelings in any way. I saw a few cases of pure nostalgia, and I believe there were many such, during the first six months of service, amongst the young men of the army. The marasmus, after remittent fever, was striking, and convalescence remarkably slow. These patients had the same cadaverous appearance and haggard expression of countenance as is common to children who are laboring under *tabes mesenterica*. There was also that loose and wrinkled condition of the skin of the abdomen which is common in such cases. Diffusible stimulants were very freely given in these cases, and with the most happy effects.

Two cases of wounds came under my notice that are worth mentioning, on account of the result. The first occurred in the Fifth Louisiana Regiment, (Col. Peyton's,) whilst stationed at Burita. Two men, previously good friends, had been drinking together, when an altercation ensued, and one of them drew a large Bowie knife and

plunged it into the breast of the other. I reached the wounded man at the same moment with the surgeon of his regiment. On examination, we found a piece of the lung, two and a half or three inches in length, protruding from the wound, which was about an inch below the left nipple—the knife passing between the ribs, downwards and outwards. The wound was at least three inches in length. After consultation, we concluded to introduce the wounded portion of lung within the thorax, and to close the external wound with the interrupted suture. The man was kept upon the most strict antiphlogistic treatment, and some twelve or fifteen days after, when I last saw him, there was every reason to believe that he would entirely recover. The knife with which this wound was given was two inches wide, and it must have penetrated the lung, four inches. On reflection I am not convinced that our practice in this case was the best that could have been adopted. The wounded portion of lung had only an attachment of three-fourths of an inch, and would it not have been better surgery to have clipped it off than to have replaced it within the cavity of the chest?

The other was a case of gun-shot wound, which occurred accidentally. A man was shot in the left axillæ, with a musket ball; the man who fired the gun being immediately opposite, and about one hundred and twenty yards distant. Being absent from camp I did not see the wounded man until the evening of the second day after the accident. On examination I could find no signs of the ball. The man was laboring under distressing dyspnœa. I learned that he had expectorated blood freely, when first shot, but now his cough was suppressed and he could not expectorate at all. The left cavity of the chest seemed to be half full of blood, and on raising the man and turning him on the left side, at least half a pint of blood escaped through the wound. The following day he was bled twice, and the treatment was strictly anti-phlogistic. About a week after, the track of the ball was plainly to be seen. After passing through the chest it made its exit half way, and just below the spine of the scapula; thence glancing inwards and downwards, lodged near the spinous process of the twelfth dorsal vertebra, where I extracted it. Beattie, the man whose wound I have just been describing, lives in this city. Prior to the accident he was a robust and healthy man, but he has now become thin and wan, and is frequently troubled with a cough.

---

From Professor WILLIAM B. HERRICK, M. D., of the Rush Medical College at Chicago.

IN CAMP, NEAR MON CLOVA, MEXICO, }  
November 5, 1846. }

I am now writing in the vicinity of a Mexican town, containing about 5000 inhabitants, situated between, and nearly surrounded by, mountains.

The distance from San Antonio, Texas (the point where the column under General Wool was organized), is about 400 miles. We started from San Antonio the second day of October, and arrived here the 2d of November, thus making a march of thirty days without stopping.

This marching, day after day, so far into the interior of Mexico without meeting with any opposition, and with no prospect of a fight, causes a great deal of dissatisfaction, and is the subject of constant complaint with our Illinois Volunteers.

When on the march, we start in the morning by sunrise, go from 12 to 15 miles without halting, excepting for a short time now and then, and encamp for the rest of the day and following night, generally about 11 o'clock, A. M. As I remarked in a former letter, we pass through all the towns in our way with drums beating and colors flying. In the towns of most importance we take formal possession, and plant the American Flag in the most public and conspicuous position.

A few miles from each town we have, in every instance so far, been met by the Alcalde, or ruler, with the principal men of the place, as a deputation from the citizens; and it is by means of such deputations that the people throughout this section of country, have unanimously, as I believe, expressed their determination to offer no opposition to our progress. In truth, it seems to be their wish, not only to remain neutral in the contest between the United States and their central government, but many of them openly express a desire to become separated from it, and a wish to form a republic of their own, or to come under the protection of that of the United States.

As an evidence of their oppressed condition, and to show from whence this feeling originates, it may be stated that, according to their representation, the Mexican army, in marching through their country, would live by robbing and plundering the inhabitants. The officers of ours, on the other hand, treat them as friends when they are friendly, and pay them fair prices for the means of subsistence.

With regard to the question, will it be good or bad policy to admit this portion of Mexico into the Union? intelligent men will of course differ in opinion. For my own part, I do not believe the Mexicans, as a mass, are, as yet, sufficiently far advanced in civilization and intelligence to admit of their establishing and sustaining a truly republican form of government; and therefore it would be not only bad policy, but dangerous, to endow them, at once, with the rights and privileges of citizens of the United States.

As examples of their barbarous customs, and tyrannical laws, the following may serve as specimens.

In many parts of the country matrimonial engagements are temporary merely: it being a common custom, as I am informed, for parties to agree to live together as man and wife for a few months only, at the end of which time either is at liberty to dissolve the compact. As an excuse for this demoralizing custom, they say that the



Indians have, in many parts of the country, destroyed so many of the men, that there are to every male inhabitant five or six females, and that unless such an indulgence be permitted, the population of their towns will rapidly diminish, and eventually become entirely extinct. Whether this be a sufficient reason or not for such an absurd and ridiculous custom, our readers can, for themselves, determine.

One example of their oppressive laws, and we are done for this time with Mexican institutions, and the character of the people.

In marching through this part of Mexico, we find the inhabitants, not scattered over the country as in the United States, but collected together, in towns from 20 to 50 miles apart, in the rich valleys between the mountains. We frequently meet with a collection of rude buildings surrounded by a wall, and inhabited by numerous slaves who, like the herds of cattle, and many square leagues of land in the vicinity, are owned by a single tyrant. An establishment of this kind is called by the Mexicans, a hacienda.

The slaves thus condemned to servitude and a life of bondage are not, like ours of the United States, marked by nature as a different race of beings from their masters, but in many cases, the Mexican slave is as well formed, physically, and is as intelligent as the tyrant who owns and governs him.

This being the case, the question naturally arises, why is it that people of the same race, not differing materially in natural endowments, are a few of them masters and the rest slaves?

This state of society results from a most tyrannical law, which provides that whenever one person becomes indebted to another, the debtor, unless he is able to make immediate payment, becomes at once the slave of the creditor, and is obliged to labor for him at a rate not exceeding 3 or 4 dollars per month, till the demand is cancelled. The amount earned, in this way, by the debtor, is often less than the sum required for his subsistence, consequently he is obliged to purchase on credit still more of his master, and thus to perpetuate a life of bondage.

The worst feature in this system of slavery for debts is, doubtless, that which provides for the perpetuation of this life of bondage; for it is not the debtor alone that is bound thus to give up his liberty, but his children inherit his debts, and with them lose the rights of free men.

Having thus given a few hints concerning the customs and laws of the Mexicans, we will now proceed to the consideration of a subject which more immediately interests the people of Illinois, especially the medical men of our State.

Since joining the army, I have, for the most part of the time, been the only medical officer attached to the 1st regiment of Illinois Volunteers, and can of course speak with entire confidence, with regard to the diseases which have prevailed among the volunteers of this regiment.

On entering upon the duties of my office at Camp Crocket, near San Antonio, Texas, I found from 60 to 70 on the sick report. Of

the cases thus reported, a majority were miasmatic fevers of a mild grade, which yielded readily to gentle laxatives and quinine, in doses of from 10 to 15 grains in the course of 24 hours.

This kind of treatment soon reduced the number of sick from 75 to 40, in a command of about 800 men. My experience, so far, in the army, with this class of diseases, has fully confirmed my belief in the utility of administering large doses of this most efficient remedy in miasmatic diseases. I have given it in all stages of these fevers, with uniform success, and without, at any time, producing unfavorable results. Diarrhœa is another disease very prevalent in the army; but, in most cases, it is of a mild form and yields readily to some mild mercurial, such as blue pill followed by, or combined with, opium and camphor. There are a few cases of a chronic form however, that do not yield so readily, but continue obstinately to debilitate the patients and produce emaciation. Many of these, I have no doubt, are dependent upon an ulcerated condition of the mucous membrane, whilst others perhaps result from torpid or diseased livers.

But of all the diseases to which the volunteers have been subject, those of the lungs consequent upon measles, have been the most destructive to life. From what I could learn of the diseases, previous to my joining my regiment, nine-tenths of those which proved fatal were of the lungs, and in all the cases, the patients had had measles whilst on the march, or in camp, in cold tents and sleeping upon the ground. To those acquainted with the progress of this cutaneous disease, and its tendency to produce lung affections under any circumstances, it will not appear strange that it was the cause of fatal results in so many cases, nor will they be surprised to learn, that all kinds of treatment under the circumstances proved of little or no avail.

We are now on our march through the high lands of Mexico, where there are, probably, as few causes of disease, as in any section of the world. It is to be expected, therefore, that unless we get into a brush with the Mexicans, and as a consequence, have a few surgical cases, we shall have but little of professional interest to communicate. Still, we shall not let any opportunity pass, of giving to our readers interesting intelligence, whether it be of a professional or general nature.

---

To those who are hypochondriacal or who can enjoy a hearty laugh, we recommend the following professional witticism:—

*A New Plan of Medical Reform.*

To the Editor of the Boston Medical and Surgical Journal:

MY DEAR SIR,—The causes that contribute to the origin and sustenance of empiricism, are subjects of interesting investigation at the present time. I think it a matter of regret, that many influential

persons, fired by an ill-judged scientific zeal, have endeavored, by sober argumentation and rules of logic, to demolish the prevailing systems of quackery. All past experience proves, very conclusively, that to convince a man's judgment when his prejudices are enlisted on the opposite side, is a hopeless undertaking. Who ever heard of a single convert being made by a religious controversy? The antagonists themselves commence their set-to in all the over-boiling exuberance of christian charity—like a couple of friends sparring. One finally gives the other a dab which sets his nose to bleeding; he retaliates, and their light sparring becomes a serious matter of fist and scull.

Our friends of the *schools militant* commence their attack upon the quacks, by the declaration of sundry sound and indubitable aphorisms—such as “truths are stubborn things,” &c. To this I reply, “and so are asses;” there is nothing more difficult than to drive one of these long-eared gentry one way, when he pertinaciously sets his mind upon travelling another. Send a country lad to drive a pig: does he endeavor by compulsion to get the contumacious brute to walk off in the desired direction? Not he; he knows by experience that he would only get his labor for his pains—the pig, like Falstaff, will “give no man a reason on compulsion.” The only way to succeed easily is to make the spirit of insubordination subserve his purposes, and he catches the animal by the tail to pull him in the opposite direction. Any other plan, he will tell you is all gammon.

The wrong plan has been adopted for the opposition of homœopathy. Denunciations have been forged, and hurled with thundering sound, to no effect, and the credulity which enshrouds men's faculties, leaves them blind and willing victims to the doctrine of infinitesimal doses. The system has been handled with rough ceremony, and the monstrous faith in less-than-nothing doses assailed with the fury and indignation so easily excited by a threatened invasion of pecuniary interest; but the gaping crowd still swallow the little powders, and Herr Homœopath laughs in his sleeve as he pockets the fat fees so easily fished from the pockets of credulous hypochondriacs and hysterical women.

You are wrong, gentlemen! Cease your opposition; admit the truth of Hahnemann's nonsense; nay, outstrip him in fertility of invention and deception. If a homœopath tells you that a globule of sugar, moistened with the 30th dilution of a given remedy, and applied to the nostrils of a patient in extremis, will relieve him, reply to him, and shout to the world that we have a remedy, so exquisitely powerful in its influence upon the animal machine, and only known to allopathic physicians, that the same globule moistened with the 300 dilution (!!!) and applied to the nether end of a dead man, will bring him to life! You must learn the game of brag, and always “go better.” Try your d—st (excuse Kentucky vernacular) to persuade people that there is really nothing strange in homœopathy, compared with some half-hatched system with which you are about



to astound the world, catch the pig by the tail, and two to one the "Dutch doctors" will soon be found upon some other hobby, denouncing their quondam favorite as the most insignificant, irrational, and transparent hoax that was ever devised and attempted.

So with hydropathy. If Priessnitz swears that he cures his patients by pouring cold water by the gallon down their throats, turn up your noses at him, and tell the world that you are much more successful by squirting buckets full of hot water up the back way.

He assails the enemy in front, you behind—he carries the citadel by storm, you by surprise; and I appeal to all authority to decide which manœuvre is the safest and best. If he publishes tables of cases that show a success amounting to 75 per cent., you publish larger tables, and claim 95 per cent.! Admitting that you do not adhere to veracity, and that you are charged with it; you may be thankful that it is so, raise the cry of persecution, and your fortunes are sure.

A good while since, after Harvey had enlightened us concerning the circulation, it was announced to the world that life might be preserved, *ad infinitum*, by the process of transfusion. Old people pricked up their ears, and eagerly stretched out their emaciated arms to receive a-new the vital current from a sheep! What a captivating idea! The grand secret of earthly immortality resting upon the piston of a pewter squirt! How the sublime blends down into beautiful harmony with the ridiculous! For a time syringes "looked up." But it was soon discovered that this great idea was "as the baseless fabric of a vision." And yet this was the wisdom of Solomon, compared with some notions fashionable in our day of new lights.

Homœopathy is certainly a very popular delusion, and, like some other delusions, exceedingly agreeable, if we could only persuade ourselves of its truth. Who would not rather be cured, "*cito et jucunde*," by the sugar of milk, than to die, "*secundem artem*," under the remorseless fire of a "regular practitioner's" prescription? What if a man is told, by sneering opponents of the system, that the homœopathic medicine is a very near approach to pap, and that it is exceedingly appropriate to his infantile credulity!

Let those laugh that win. There has been a good deal of speculation concerning the origin of homœopathy. It has been attributed to ignorance, superstition and craft, and some are even uncharitable enough to believe that Hahnemann himself acknowledged, before his death, that it was all a humbug. I profess, Mr. Editor, to be an observing man, and I think I can explain the matter to the satisfaction of every reasonable individual, of course including yourself in the category.

You remember, doubtless, that in old times people had no nerves—the old gentleman in the play said that he never had any in his life. Nerves and hysterics are things of purely modern invention. The "vapors" and the "blues" owe their existence to the "conventionali-

ties of fashionable society." The hyper-sensibility which has, in these latter days, come to be considered the indispensable of refinement and fashion, seems to have extended to the stomach and bowels. A while since, an honest, rousing dose of physic was required to make an impression upon the sturdy organs of a patient—the encounter between the doctor and the disease was a fair stand-up fight, soon ended with hard blows, and no favors asked. But the fashion of us moderns, which makes a man the creation of starched dickies, high-heeled boots and starched waistcoats—the thing of a barber's brush and a tailor's yard stick; and angelic woman, a swaddling lusus—a heterogeneous compound of wad of cotton, French chalk, buckram, and strips of whalebone, has drawn so exquisitely fine the delicate cords of sensibility, that the "30th dilution" applied to the nose proves perfectly overpowering. There are thousands of persons, now-a-days, of both sexes, who under proper circumstances, can die Pope's aromatic death.—Of course they come to life again, modestly expecting the performance to be encored! Great heaven! What is the world coming to, when sacred sensibility is worn as a harlequin's dress, to amuse an audience, and monkeys are become the highest objects of emulation to mankind? "Just to that point [remarks an ill-natured friend at my elbow] which so far divests them of common sense, as to make men credulous of infinitesimal agencies." Softly, my dear sir, we must take the world as we find it.

Do you not perceive that Hahnemann's system is the offspring of necessity and of nerves? You would begin your reformation where it ought to end: if you restore mankind to a state of health, bodily and mentally, and blunt by proper education the morbid sensibility of the nerves, homœopathy will die a natural death; but destroy at once the little globules, and what becomes of human nature!

Besides all this Mr. Editor, we profess to be a little wiser than our fathers. I fancy, sir, that we require something a little more pretending than sheep saffron and barn-yard poultices to suit the taste of the present generation. If we cure disease by conjuration which they encountered with the awful list of pills, portions and plasters; why not? We can even quote precedent for our practices. There was a famous pill, celebrated in Pindaric verse, which, with your permission, I will copy.

"A bumpkin came among the rest,  
And thus the man of pill addressed:  
'Zur, hearing what is come to pass,  
That your fine pill hath cured the king,  
And able to do everything,  
D'y'e you think, zur, t'will make me find my ass?  
I've lost my ass, zur, zo should like to try it;  
If this be your opinion, zur, I'll buy it.'  
'Undoubtly!' the quack replied,  
'Yes, master Hob, it should be tried.'  
Then down Hob's gullet, cure or kill,  
The grand imposter pushed the pill,  
Hob paid his fee, and off he went;  
And traveling on about an hour,

His bowels sore with pains were rent;  
 Such was the pill's surprising power,  
 No longer able to contain,  
 Hob in a hurry left the lane,  
 And sought the grove—where Hob's two eyes,  
 Wide staring, saw with huge surprise  
 His long-eared servant Jack, his ass!!  
 'Adzooks! a lucky pill!' quoth Hob;  
 'Yes, yes, the pill hath done the job.'

"Globules (remarks again my crusty friend) have discovered more asses in these times than did Pindar's pills; and what is stranger, all are affected with the mange, the itch, or—something worse!" But, my good sir, this is not the fault of the system of Hahnemann. That fact does not condemn, by any means, the sugar of milk; only the mal-practice, and filthy habits of the times. We must do penance, in mercury and sulphur, for past peccadilloes, and thank God if this is the nearest acquaintance we are destined to have with brimstone. Alopahy has done nothing more (we are told,) in 2500 years, than to discover these two specifics, and homœopathy, for-ooth, must teach her to employ these properly! It remains to be seen what the "Young Physic," recently born under Dr. Forbes' obstetric management, will accomplish. Until then, with an apology for the length of this straggling epistle, allow me to subscribe myself, with great respect,

Your obt servant,

Lexington, Ky., Nov. 14th, 1846.

OLD PHYSIC.

*Bloody Vesicle of the Vagina.* By JOHN A. COTTEN, M. D., of Greenwood, Mississippi.—(Western Journal.)

July 7th, 1837, Dr. Stokes and myself were called to see a servant girl of Mr. E. H. Stone, then of Madison county, Miss. The patient was aged about twenty-three years, decidedly above ordinary size, well proportioned, and of sound constitution. She was between seven and eight months advanced in pregnancy, and complained of an incessant itching and burning sensation at the vulva, accompanied by general constitutional disturbance. Upon examination, we found situated within the vagina, about one inch from the sphincter, an exceedingly vascular tumor, very elastic, of an oval form, about one inch in diameter. The woman informed us that the growth had been very gradual, and the uneasiness proportioned to its size, the pain increasing with the growth of the tumor. To be more specific, the tumor had been about a month acquiring the size to which it had attained when we saw it. In appearance and consistency it resembled more than any thing else a bloody vesicle filled to its greatest capacity. Thinking as we did that the gravid uterus afforded the best rationale of the complaint, we took from the arm of the patient about twenty ounces of blood, ordered a saline cathartic, cold astrin-



gent washes to the parts, low diet and the recumbent posture. This plan of treatment was persisted in for about ten days, without checking in the least the progress of the disease.

Having failed in this attempt to disperse the tumor, and no pulsation being perceptible, it was proposed to evacuate the tumor by puncture, and accordingly Dr. Stokes made a small opening with a thumb lancet. A stream of dark venous blood, of fully the size and force of that in venesection from the arm, followed the operation. We suffered the blood to flow to the extent of about ten ounces, without the slightest diminution in the size of the tumor, the supply being fully equal to the loss. We began now to suspect that the tumor was aneurismal in its nature. All efforts to arrest the flow of blood by compression proved abortive. I finally proposed strangulation with the ligature, and, Dr. Stokes concurring in the suggestion, I immediately passed a curved needle, armed with a strong thread, below the base of the tumor, and divided the ligature so as to embrace the posterior half with one portion of the thread and the anterior with the other. The ligature was tightly drawn around the respective portions of the tumor, and the hemorrhage immediately ceased.

On the fourth day the strangulated portion sloughed, and the patient appeared to be doing well for a few days; but in a little while the same itching, burning sensation which characterized the pain of the first tumor began to manifest itself still higher up the vaginal canal. Careful examination brought to view another tumor of the same appearance and about half the size of the first. After much difficulty, we succeeded in embracing with a double ligature the base of this tumor also, as we had practised in the first. In due time it sloughed, and all unpleasant symptoms subsided. At the full term, our patient gave birth to a well grown and healthy child.

It is now more than nine years since the removal of the tumors, and though the woman has given birth to three or four children since, there has been no return of the disease.

---

*On the Use of the Hydriodate of Potassa.* By AUGUSTUS VAN BUREN, M. D., Assistant Physician to Bellevue Hospital. (N. Y. Journ. of Med.)

John Daly, aged 38, native of Ireland. Admitted in the Penitentiary Hospital, Blackwell's Island, with a primary chancre, nearly healed, and three large and deeply-excavated buboes, with jagged and indurated edges, nearly resembling cartilage.

He had had syphilis four years before, but has never enjoyed good health since, being much affected every spring and fall with rheumatic pains; complains now of aching pain in bones, and severe headache, with partial remissions in the morning; has been salivated in the city before entering the hospital.

He commenced taking sixty grains a day of the iod. potass. in solution with syrup and water; this dose was in a few days increased to one hundred and twenty grains; the sores were dressed with poultices of bread and flax-seed, and the pulv. cantharides sprinkled on some three or four times; in a few days healthy granules were seen peeping up, and the sores began to take on a healthy action.

The dose of 120 grains per diem was kept up for twenty days without any apparent ill effects, or the usual results of large doses of the hydriod. potass.; the skin, instead of breaking out in pimples, gradually assumed a dusky brown colour, somewhat resembling the effects of long-continued doses of the nitras argenti.

The sores were now healing rapidly, pains much diminished, appetite good, and able to rest very well at night.

On the thirty-first day after admission, and the twenty-first of the 120 grains, thinking to expedite his cure, he swallowed during twelve hours, the remainder of a solution containing about 300 grains.

Six hours after he was seized with violent pains in the head and stomach; countenance anxious, tongue coated, pulse small and very quick. These symptoms, notwithstanding all treatment, gradually increased to delirium, which lasted for 48 hours, after which they slowly abated, and in twelve days more he was discharged cured.

The sores were now completely healed, leaving that depressed, shiny, and dusky brown color, peculiar to syphilitic cicatrices; the pains in bones had disappeared, and he was now able to rest well at night; since then he has been daily employed working out stone in the quarry, and is apparently in possession of good health.

This is one of a number of cases of the same kind, where the dose of the hydriodate was carried to a great extent; but the only one where it was not followed by those peculiar eruptions on the skin, which in this institution are found to be one of the common accompaniments of large and continued doses of the iodide of potassium.

The above case is in corroboration of the experience of Dr. Elliotson, as described by him in the London Lancet, for the years 1831 and 32, page 728. And also of Dr. Buchanan, in the London Medical Gazette, Vol. XVIII., page 519. Dr. E. states, that on many occasions he exhibited two drachms of the iodide three times a day, not only without any injurious effects, but with decided and marked improvement to his patients. Dr. B. is stated to have given it to the great extent of  $1\frac{1}{2}$  oz. a day with similar results.

---

*Aneurism by Compression.*—(Dublin Quarterly Journal.)

On this subject we notice the accidental discovery, by a patient of Dr. Harrison, of the application of a number of clamps (such as used by joiners and cabinet-makers, to secure their glued wood-work,)

along the course of the artery, proving it not to be necessary completely to arrest the pulsation in the tumor; but by causing a lessened current of blood through it, produce coagulation and a contraction of the sac. (Mr. Wilde.)

Dr. Bellingham applies two compressing instruments upon separate parts of the limb, one tightened, the other not; and by thus alternating the pressure, producing the same effect as if constant compression were maintained at one point, the patient being enabled to bear it for a much longer period than other instruments.

*Tabular arrangement of all the Cases of Femoral and Popliteal Aneurism which have been treated by pressure on the Femoral Arteries in Great Britain and Ireland.*

| No. | Date. | Surgeon.        | Locality.    | Description of Aneurism. | Age of patient | Result.         |
|-----|-------|-----------------|--------------|--------------------------|----------------|-----------------|
| 1   | 1820  | Mr. Todd        | Dublin       | Popliteal                | 30             | Fem. Art. tied. |
| 2   | "     | "               | "            | "                        | 27             | "               |
| 3   | 1825  | "               | "            | "                        | 36             | Cured.          |
| 4   | 1824  | Mr. Duggan      | "            | Femoral                  | 33             | "               |
| 5   | 1826  | Mr. Cusack      | "            | Popliteal                | "              | Fem. Art. tied. |
| 6   | 1843  | "               | "            | "                        | 55             | Cured.          |
| 7   | 1844  | "               | "            | "                        | 26             | "               |
| 8   | 1846  | "               | "            | "                        | 33             | "               |
| 9   | 1830  | Sir P. Crampton | "            | Femoral                  | 36             | "               |
| 10  | 1842  | Mr. Hutton      | "            | Popliteal                | 30             | "               |
| 11  | 1843  | Dr. Bellingham  | "            | "                        | 32             | "               |
| 12  | 1844  | "               | "            | Femoral                  | 35             | "               |
| 13  | 1846  | "               | "            | Popliteal                | 40             | Doubtful.       |
| 14  | 1843  | Mr. Liston      | London       | Femoral                  | 30             | Cured.          |
| 15  | 1844  | "               | "            | "                        | 53             | "               |
| 16  | 1843  | Dr. Harrison    | Dublin       | Popliteal                | 29             | "               |
| 17  | 1844  | Mr. Kirby       | "            | "                        | 28             | "               |
| 18  | "     | Mr. Allen       | Haslar Hosp. | "                        | 32             | "               |
| 19  | "     | Mr. Greatrex    | London       | "                        | 27             | "               |
| 20  | "     | Mr. Porter      | Dublin       | "                        | 29             | "               |
| 21  | 1845  | "               | "            | "                        | "              | "               |
| 22  | 1844  | Mr. Jolley      | Torbay       | "                        | 28             | "               |
| 23  | 1843  | Mr. Harrison    | Bristol      | "                        | 42             | Fem. Art. tied. |
| 24  | 1845  | Mr. Darnell     | Chatham      | "                        | 38             | Cured.          |
| 25  | 1846  | Mr. Mackern     | Litherland   | Femoral                  | 30             | "               |
| 26  | 1845  | Mr. Storks      | London       | Popliteal                | 32             | "               |
| 27  | 1846  | "               | "            | "                        | 24             | "               |
| 28  | 1845  | Mr. O'Farrell   | Dublin       | "                        | 32             | "               |
| 29  | 1846  | "               | "            | "                        | 37             | "               |

Thus 29 cases of aneurism—6 femoral and 23 popliteal—have been treated by pressure upon the artery leading to the sac; in 4 the femoral artery was tied, chiefly from want of confidence in pressure, on the part of either surgeon or patient, and in 25 instances this mode of treatment was successful. Mr. Todd's three cases, Sir Philip Crampton's case, Mr. Duggan's case, Mr. Cusack's case in 1826, and also that of Dr. Molloy and Mr. O'Farrell's two cases,



---

have not been before introduced into any of the notices or tables of this operation which have appeared in the periodicals.

In ten instances, local pressure on the aneurismal tumor by means of pads and bandages was used, in addition to the pressure by the instrument. An examination of the published cases will show how irregularly the pressure was applied; and it is quite apparent that its removal at a particular time, even for a few minutes, and allowing the flow of blood through the sac again to take place, will undo all that had been before effected. It is, moreover, very possible, that in many instances the pressure has been continued far longer than was necessary.

---

*Case of Hydrocephalus successfully treated by Iodide of Potassium.*

By LYMAN BRACKETT, M. D., of Rochester, Fulton co., Indiana.  
(Illinois and Indiana Medical and Surgical Journal.)

Josephine S. ætat 6 years, was seized on the first of April, 1846, with the usual symptoms of Hydrocephalus, which continued to progress, in defiance of the most active treatment, given with a view of checking the inflammation and preventing the effusion of serum, the symptoms of which have given the name of hydrocephalus to this truly obstinate and at times, fatal disease. The inflammation continued, and effusion took place (as indicated by the symptoms) after the usual course had been steadily and perseveringly tried for the space of two weeks. During the last six days of this time she had been lying insensible to sight and sound; pupils very widely dilated and insensible to the strongest light. Continually rolling her head from side to side. Hemiplegia of right side and partial paralysis of the left. Incessantly moaning, except when she would throw her left hand to her head, and cry out as if in great distress. This happened about every half-hour. Vomiting would almost invariably happen when she was raised in bed into a sitting posture. Involuntary passage of fæces and urine. Then after having tried all other customary remedies, I resolved on using the iodide potassium, knowing she could not long survive in her then condition.

I began by giving an aqueous solution of the iodide (composed of iodide of potassium,  $\mathfrak{v}$  to  $\mathfrak{z}$  water,) gtt. xv. every three hours increasing the dose gradually to 30 gtt. An evident amendment was the next day perceptible, when some soreness of the mouth and bleeding of the gums took place. From thence forward she improved rapidly, and on the fourth day from commencing the iodide, I had the satisfaction of pronouncing her out of danger. The loss of power over the muscles of locomotion and of speech was not, however, perfectly relieved by it, but was restored by the epidermic application of a solution of strychnine along the course of the spinal column.

The solution of strychnine was of the following composition:—Strychnine, grs. viii.; acetic acid 3i.; alcohol ʒi: If you think the preceding case is worthy of a place in your Journal you will please publish it. I have made it as brief as possible that it might not occupy too much space.

---

#### BIBLIOGRAPHICAL.

1. *A Practical Treatise on Inflammation, Ulceration and Induration of the Neck of the Uterus.* With remarks on the value of Leucorrhœa and Prolapsus Uteri, as symptoms of Uterine Disease. By JAMES HENRY BENNET, M. D.

A small monograph bearing the above title, has recently been republished by Messrs. Lea & Blanchard, Philadelphia. The many able works that have recently issued from the press, on the Diseases of Females, especially those of Churchill, Lever, Ashwell Lee and Colombat D'Isere, seemed to have left little to expect or desire on the pathology and treatment of uterine diseases; but this little book cannot be regarded otherwise than as a valuable acquisition.

The excellent opportunities Dr. Bennet enjoyed, as Physician "interne" in some of the principal Hospitals in Paris, of observing the practice of some of the most eminent physicians of that metropolis, and of investigating uterine diseases, has enabled him to explain more satisfactorily than has hitherto been done the nature and causes, and to furnish some useful information on the subject of the therapeutics of inflammation, induration and ulceration of the cervix uteri, which he justly considers the most common of all uterine lesions.

The extreme frequency with which the speculum is employed in Paris, not only in investigating diseases of the womb and vagina, but in examining all licensed prostitutes and all women who, after being brought before the police, are not claimed in a certain time by two respectable citizens, affords physicians opportunities for studying uterine pathology, which they cannot obtain in the United States or Great Britain, especially in private practice, where female delicacy in itself most laudable, when not carried to a culpable degree, and the more criminal remissness of physicians, in not urging the importance of such examinations, often cause them to be delayed until too late to profit by the information furnished by them. Many deplorable instances in this city might be adduced, if it were necessary, to prove this position.

From the customs referred to in Paris, diseases of the mouth and

neck of the uterus are often detected in their incipency, sometimes even before they are suspected by the patients themselves; in which stage they generally yield promptly to local applications, with little or no constitutional treatment.

In private practice in the United States, local applications by inunction and different kinds of cautery, are too much neglected, but the practitioner cannot expect the same satisfactory success that Dr. Bennet enjoyed in the Parisian Hospitals, inasmuch as he has to contend with more inveterate cases which will call in requisition as adjuvants the preparations of mercury and of iodine, chalybeate tonics and other internal remedies.

We cannot recommend too highly this little book to the attention of all physicians who desire to understand the pathology and treatment of some of the most frequent diseases peculiar to women.

J. A. E.

2. *Lectures on Natural and Difficult Parturition.* By EDWARD WILLIAM MURPHY, A. M., M. D., Professor of Midwifery in the University College, London, &c., &c.

A work bearing the above title has recently been issued from the press of Messrs. Samuel S. & William Wood, New York. This is not a complete system of Midwifery, but a series of lectures on natural and difficult parturition, and several important subjects connected with the principles and practice of obstetrics.

The author's views and principles are sound, judicious and highly practical: he treats every subject on which he touches in a scientific, able and masterly manner. We only experienced one regret after reading this work, an unusual one, that he had not written more—that he had not comprised in his lectures other important subjects on which we desired to have his opinions and the result of his ample experience. We hope the next edition will be more comprehensive. In its present form it is a valuable work, and worthy the studious perusal of every practitioner, as well as student of Midwifery.

J. A. E.

3. *Velpeau's Operative Surgery.* MOTT. vol. III. New York, 1847. Samuel S. and William Wood, publishers. pp. 1162. With an Atlas of 21 Plates.

In a previous and recent No. of this Journal, we took occasion to give our opinion of this work. The translation of Velpeau's greatest publication issued in Paris 1839, has now been completed by Dr.



---

Townsend of New York, with the addition of several hundred pages furnished by Dr. Mott of the same city. The work has been published in three immense volumes, numbering over 3000 pages, besides the Atlas of plates.

We have nothing to add to our former opinion, which is one of regret and mortification too, that Dr. Mott should have condescended to play second to his junior, M. Velpeau, instead of publishing a Surgery of his own. We have believed, and still consider him second to no man living as a surgeon; and we are greatly surprised in examining the plates to find not a single instrument added by him. The Atlas is literally an exact copy of Velpeau's, issued in Paris eight years ago.

4. *Scrofula: its nature, its causes, its prevalence, and the principles of Treatment*. By BENJ. PHILLIPS, F. R. S., &c. Illustrated with an engraved Plate. Philadelphia: Lea & Blanchard, 1846. pp. 350.

This work has also been noticed in our Journal from the English edition, and we have only referred to it, to acknowledge the renewed obligation we are under to its generous publishers, for a copy issued by them. This is the best work extant on the all-important subject of Scrofula.

---

### PART III.—MONTHLY PERISCOPE.

*Asphyxia Neonatorum*.—M. Depaul has written a very elaborate paper on the subject of artificial respiration, as a means of rescussitating still-born children. He instituted a series of experiments on the dead subject, with the view of determining the amount of danger of injuring the lungs by the insufflation of air. He satisfied himself that this danger is almost an imaginary one, since, even after the lungs were removed from the body, it required several most forcible insufflations, far stronger than would ever be made in the case of a still-born child, to produce rupture of the pulmonary vesicles. On the other hand, he was struck with the great force needed thoroughly to inflate the lungs, while their resiliency was sufficient to expel the greater part of the air. He found, moreover, in many cases where children had died suddenly after breathing for several hours or days, no other morbid appearance than an unexpanded condition of a large portion of the lungs. With reference to the mode of practising artificial respiration, he condemns the mere blowing into the mouth as

inadequate, and recommends the use of a tracheal tube. He is of opinion that there is more danger of failing from imperfect insufflation than of doing harm by its too forcible performance. It is of importance, likewise, that it should not be suspended on the first sign of breathing, but continued until the child cries loudly and respires well.—[*West's Report. American Journ. of Sciences.*]

*On the Results of Drinking.* By W. ORMEROD, Esq.—Of all diseases of internal organs produced by drinking, the granular liver seems to have attracted most attention—perhaps justly; but there is no doubt, that of all organic diseases, the two most to be feared in intemperate persons with recent surgical injuries, are the granular kidney, and slight, but general emphysema, with a dilated, but not always much diseased heart; and in persons past the middle of life, dying rapidly in hospitals, after operations and surgical injuries, combined with much loss of blood, these two affections of the urinary and respiratory organs are very far from uncommon.

The three chief affections destroying patients after operations and injuries,—namely, the general habit produced by drinking; secondly, organic disease of the lungs and kidneys, especially emphysema in the former, and granular disease in the latter; and, thirdly, tubercle,—act very differently, and at different periods. During the early period, and often for weeks after operations, patients laboring under tubercular disease do well; and it is often only at the absolute return to health, rather than during the recovery of the patient from the operation itself, that the effects of tubercle begin to show themselves. Organic disease produced by drunkenness, and habitual drunkenness, act differently; the organic disease presses heavily at every period, and may destroy life early or late; but the mere habits of the drunkard show themselves chiefly at a very early period. The patient who nearly sinks from his unsound organs within the first few days, often lags on for weeks and months in danger; but the man who has simple delirium tremens is taken ill directly, and often dies; but if he recovers from his delirium, he generally gets well from the operation, and sometimes quickly.—[*London Lancet.*]

*Blindness caused by the use of the Sulphate of Quinine.* By JOHN M'LEAN, M. D., Prof. of Mat. Med. in the Rush Medical College.—Four cases of blindness are reported by Prof. M'Lean, which he attributes to the use of Quinine. In these cases the medicine was administered in large doses; in one, sixteen grains were ordered every hour, and continued until nearly an ounce was taken. The report closes with the following remarks:—We think it clear that the blindness in the foregoing cases was the effect of the quinine; for we see it in each, coming on suddenly during its administration in large quantities, and at a time, when no other medicine was given that would be likely to produce such results. Here, cause and effect appear to be closely connected, and are so plain, as scarcely to admit

of the possibility of a doubt. From the symptoms accompanying the foregoing cases, we should judge that the proximate cause of the blindness, was mainly an affection of the retina or optic nerve, producing amaurosis.—[*Ill. and Ind. Med. and Surg. Journal.*]

*Treatment of Irritability of the Stomach.*—In irritability of the stomach, with the deposit of earthy phosphates, arising from derangement of the functions of the spinal cord, and evinced by emaciated countenance, burning, gnawing pain in scrob. cordis, and heavy pain across the loins, tongue clean and red, pulse quick and sharp, skin dry and imperspirable, with vomiting after meals; try strychnia, as in the following formula:—Strychnia gr. j., acidi nitrici dil. ʒi., aquæ ʒxij., solve, atumat æger, fiat ʒj. ter in die, and rub the scrob. with a liniment of croton oil; milk dietary, consisting of eighteen ounces of bread, one ounce of butter, and two pints of milk daily. The medicine to be taken fifteen minutes after each meal. The strychnia acts particularly upon the spinal marrow; and it is supposed that when alkaline urine is secreted, independently of the character of the ingesta, there is always some lesion of this part. (Dr. Bird.)

Unfermented bread is said to be useful where there is habitual headache, acidity of stomach, flatulence, eructations, sinking at the pit of the stomach, and pain after meals; in fact, in confirmed indigestion, and to all who are subject to gout and gravel.—[*Braithwaite's Retrospect.*]

*Whooping Cough.*—Purgation with calomel; if febrile symptoms, calomel and antimony; an occasional emetic, and small and repeated doses of carbonate of potassa, or the following formula:—Potassæ carb., ʒj.; coccus cacti, gr. x.; aq. fervent. q. s. The dose according to age; for an infant, a tea-spoonful thrice daily. (Dr. Allnatt.)

Dr. Wachtl, of Vienna, recommends the ammoniated tincture of cochineal.

In the first stage, mild antiphlogistics, daily emetics, and strict confinement to the house, except in summer months. In the latter stages give the following:—Tincture of cantharides, tinct. of opium, comp. aa. ʒss.; tinct. cinch. co. ʒvss. A tea-spoonful to be taken three times a-day in a little boiling water; the dose to be increased if no strangury is produced. Be careful, however, at all times, not to give opium if it can be avoided. (Drs. Graves and M'Gregor.)—*Id.*

*Chronic Rheumatism.*—A man 40 years of age, complained of chronic rheumatic pains. He was directed the following mixture:

R. Syr. Sarsaparilla, . . . ʒiii.  
Tinct. Colchici, . . . ʒi.  
Hyd. Potassa, . . . ʒiii. M.

Thirty drops to be taken three times a day.—[*N. Y. Medical and Surgical Reporter.*]



*Treatment of Diabetes.—Glucosuria.—Diet.* Strictly forbid all farinaceous substances, as those into which starch in any way enters. Gluten bread is of great value; it satisfies the cravings of the appetite. Animal food, with eggs, milk, butter and cheese, are proper. Also the following vegetables: spinage, endive, lettuce, asparagus, sorrel, haricots verts, cabbage of all kinds, along with fat pork or salt bacon; cresses with oil, and hard-boiled eggs. Fresh gluten, with butter, and cheese grated upon it, is an excellent dish. For dessert, allow olives, almonds, filberts, and walnuts; occasionally, and in small quantities, allow apples, pears, cherries, currents, gooseberries, strawberries, raisins, and pine-apples. *Drinks:* The French wines, Bourgogne and Bordeaux, about a pint in the twenty-four hours; they are astringent; sometimes the quantity is to be increased, but the least approach to inebriety is injurious. N. B. Some patients are made worse with wine. Beer is injurious. Coffee is good, and should be taken without sugar, or the quantity of sugar should be very small. Lemonade and drinks of this class are injurious. *Clothing:* Protect the body from sudden chills, by clothing it in flannel. *Exercise* should be carefully regulated; the patient should engage in those exercises in which he takes pleasure; but fatigue is to be avoided. Baths are not of much use; occasionally a tepid bath may do good; swimming in the sea has been found very useful.

*Medical Treatment.*—Carbonate of ammonia, 77 grains; rum, 310 grains; water, 1550 grains. One-third to be taken half an hour before each meal; or give it as a bolus (eight grains), with treacle, from two to ten to be taken every night.

Give Vichy water. The alkaline bicarbonates, particularly soda, are very useful.

*Dover's Powder and Opiates.*—The former is very useful; ten grains at bed-time. Crude opium and morphia often disorder the stomach.

Theriaca divina, 3ss. to 3i., every night: a drachm contains one grain of opium.

*Chalybeates and Tonics.*—When there is decided pallor of skin, resembling chlorosis, give tonic bitters with iron. The pulverised iron, or iron reduced by hydrogen, is the best form of chalybeate.

*Evacuants.*—Commence the treatment by giving an emetic and afterwards a purgative, to clear away any thing injurious in the prima viæ. Evacuants are of no use afterwards, except to combat certain symptoms.

Lime water, calcined magnesia, alkalies, nitric, phosphoric, and sulphuric acids, alum, tannin, and other astringents, are of little if any use.

*Bleeding.*—General bleeding is always injurious. Leeches or cupping to different parts, as the stomach or anus (as symptoms indicate), will be found useful, viz., where there is epigastric tenderness or suppressed hæmorrhoids.

The *chief reliance* must be placed on dietetic and hygienic means. (M. Houchardat.)—*Braithwaite's Retrospect.*

*Pain in the Side* in thoracic inflammations, generally corresponds, according to the indication of the patient, not to the precise point of the organ affected, but to one a little below it,—that is, the painful sensation experienced is in a situation inferior to the lesion. When local evacuations of blood, therefore, are ordered, or blisters, they should be directed to be applied a little higher than the painful part. (*Rostan.*) This precision is not without importance in certain cases, for it may happen that, following the indication of the patient, remedies are often applied to the abdomen, when the disease is at the lower part of the chest.—[*Lond. and Edin. Month. Journ. of Med. Sci.*

*Subcutaneous division of Sphincter Ani.*—Dr. Post stated that he had recently operated at the Hospital, for the cure of a fissure of the anus, by the subcutaneous division of the sphincter ani. The first time, he believed, the operation had been performed in this country. Nitrate of silver had been previously applied to the ulcer without benefit. A small incision was first made in the skin about one-fourth of an inch from the anus. The finger then being introduced into the rectum as a guide a director was introduced through the external incision, and forced through the cellular tissue alongside the rectum, with its groove directed from the mucous membrane. A very narrow bistoury (tenotome) was then passed along the director, and the sphincter divided. Some tension being still left, the opposite side of the sphincter was divided in the same manner. So far the operation promises to be perfectly successful, the fissure appearing disposed to heal, and the patient's bowels being moved without pain. There has been, at no time since the operation, complete incontinence of fæces, though the patient as he expressed it at first, had to be very quick in his movements. If the operation prove successful, it will be a very great improvement upon the open section of the sphincter as independently of the great difference in amount of the pain and suffering caused by the two operations, the old method frequently left the patient unable to retain his fæces for a twelve-month.—[*N. York Journal of Medicine.*

*Treatment of Gonorrhœa.*—Dr. Green stated that he has been in the habit of arresting gonorrhœa, by introducing a small bit of sponge, fastened to the end of a bougie, and saturated with a strong solution of nitrate of silver, (40 grs. to oz.) for a couple of inches into the urethra. Dr. Stewart stated that he would at the next meeting exhibit to the Society a little instrument, by which he was accustomed to effect the same object.—[*Ibid.*

*Treatment of Ganglions.*—A puncture with a point of a small lancet is a less painful and more certain remedy than a blow. The

puncture may be sufficiently large only to allow the contents to be pressed through. A pad of lint, bound down with adhesive plaster firmly applied, will almost invariably destroy the cavity in twenty-four hours.—[*Medical Gazette*.]

*Syphilis within the Os Uteri*.—In consequence of several individuals affirming that they had been infected with the venereal disease by a young woman apparently in perfect health, M. Delmus instituted a very minute examination. The exterior of the genital organs, as well as the margin of the anus, were in a normal condition. On employing the speculum, nothing abnormal could be perceived in the vagina. The os tincæ and neck of the uterus did not vary from their natural appearance in a female who had not borne children. There was nothing which indicated either inflammation or syphilis. On pressing the neck of the uterus in various directions, to ascertain the degree of sensibility of the parts, and the nature of the liquid which proceeded from it, an almost transparent albuminous matter was observed, mixed with a whitish liquid of a doubtful aspect. Some of this matter being collected with a curette, a lancet was charged with it, and four pricks made on the thigh. On the fourth day, the wounds assumed the form of four well marked chancres, and subsequently almost the whole body, not excepting the face, became covered with flat pustules, some dry, and others running. The eruption rendered the woman almost hideous, and it was not until after a mercurial course of three or four months' duration, including the use of strong sublimated baths, that she was cured.—[*Braithwaite*.]

*Treatment of Engorged Womb*.—The treatment in this case consisted in scarifying the cervix, and thus bleeding the womb; taking from one to two ounces of blood at a time, which was repeated on several occasions. She was kept at rest; the bowels were relieved by saline aperients, and she used the following injection:—Dec. Papav. vj.; Ext. Conii. ℥j.; Liq. Plumb. diac. ʒij. Speedy relief followed the use of these means, and I did not see her for some time.  
[*London Med. Gaz.*]

*Protracted Lactation*.—Dr. I. P. Smith, of Gloucester, relates in the Boston Medical and Surgical Journal, a case in which lactation was protracted for nearly twenty years, the patient never weaning one child, till the birth of another compelled her to do so. During the period mentioned she gave birth to eight children.—[*M. News*.]

*Castor Oil Emulsion*.—R. Ol. Ricini,  
Syr. fruct. Aurant. aa ʒi  
Vitellus ovi, No. 1.  
Aq. flor. Aurant. ʒi.  
M. ft. emulsio.

This makes a very pleasant emulsion which is readily taken by adults as well as children.—[*M. Delluc, New York Jour.*]



*Vermifuge Syrup.*—Extr. *Spigelia* Maryl. fl.  $\zeta$ viii.

Syr. *Sennæ* compos. (Lond. Ph.) lb. ii.

Mix while hot, and evaporate to a proper consistence. Dose, a small teaspoonful, for a child one year old — [*Ibid.*]

## MEDICAL INTELLIGENCE.

*Graduates of the Medical College of Georgia—March, 1847.*—We publish below the catalogue of Graduates at the last conferring of the Degree in the Medical College of Georgia. The bona fide number of Students in our College, exclusive of M. D's., &c., was 106. Though not quite so numerous as the previous Class, we can safely say there never has been a better one in this Institution. Among the number were those who had been engaged for 15 or 20 years in the active duties of the profession. The leading article in the last No. of this Journal was furnished by one of these, whose noble zeal and untiring devotion to his calling will long be remembered here.

|                                     |         |                            |
|-------------------------------------|---------|----------------------------|
| P. T. Trammell, of Harris co., Ga.  | THESIS, | Pneumonia.                 |
| Richard Olive, Oglethorpe co., Ga.  | "       | Cynanche Trachealis.       |
| A. A. McKee, Jasper co., Ga.        | "       | Digestion.                 |
| J. M. Couch, Coweta co., Ga.        | "       | Hysteria.                  |
| F. M. Brantly, Merriwether co., Ga. | "       | Cerebro-Spinal Irritation. |
| T. B. Phinzy, Augusta, Ga.          | "       | Pneumonia.                 |
| J. P. Hillhouse, So. Carolina.      | "       | Water.                     |
| A. W. McCoy, Alabama.               | "       | Scarlatina.                |
| T. C. Davis, Newton co., Ga.        | "       | Iodine.                    |
| A. M. Spalding, Gainesville, Ga.    | "       | Fever.                     |
| J. D. Cooper, Wilkes co., Ga.       | "       | Pneumonia.                 |
| T. C. Hitchcock, Canada.            | "       | Chymification.             |
| H. A. Shaw, So. Carolina.           | "       | Scarlatina.                |
| W. B. Shaw, So. Carolina.           | "       | Blood-letting.             |
| J. R. Price, Jefferson co., Ga.     | "       | Menorrhagia.               |
| H. R. J. Long, Madison co., Ga.     | "       | Dyspepsia.                 |
| John Rambo, So. Carolina.           | "       | Malignant Int. Fever.      |
| T. J. Darling, Richmond co., Ga.    | "       | The Tourniquet.            |
| W. T. Zachry, Columbia co., Ga.     | "       | Dysentery.                 |
| J. W. Howell, Merriwether co., Ga.  | "       | Bilious Pneumonia.         |
| S. T. Brunson, So. Carolina.        | "       | Lobelia.                   |
| N. R. Fleming, Florida.             | "       | Disease.                   |
| F. S. Colley, Hancock co.,          | "       | Turning.                   |
| Robert Campbell, Jr., Augusta, Ga.  | "       | Signs of Pregnancy.        |
| Robert Parker, Alabama.             | "       | Amenorrhœa.                |
| G. W. West, So. Carolina.           | "       | Spasmodic Asthma.          |
| W. J. Johnson, Fort Gaines, Ga.     | "       | Congestive Fever.          |
| J. W. Holt, Alabama.                | "       | Digestion.                 |
| J. M. T. Gullett, Baker co., Ga.    | "       | Hemorrhage.                |
| F. O. Dannelly, So. Carolina.       | "       | Typhoid Fever.             |
| J. D. Long, Madison co., Ga.        | "       | Cynanche Trachealis.       |
| J. C. Sims, Oglethorpe co., Ga.     | "       | Erysipelas.                |
| J. A. C. Wynn, Talbot Co., Ga.      | "       | Schneiderian Membrane.     |

*Notice of a Globular Body found in the Stomach of an Oe.* By H. H. CAREY, M. D., of Antioch, Troup county, Ga.—A few days since a gentleman of this place having shown me, what I regarded as quite a *physiological* curiosity, I take pleasure in giving you a brief account of it.

In the month of November last, Mr. McH. having killed a beef, on opening the stomach, a globular body two and a half inches in diameter was found in its cavity. The external surface of this ball was smooth, of a dingy brown color, somewhat resembling the lithic acid calculus, in appearance, and of about the same hardness. On piercing it with an instrument, it was found to consist of a *shell*, two lines thick, whose cavity was filled with *hair*, very firmly compacted. The hair resembles that of ordinary beeves—the shell was apparently composed of a mixture of earthy and vegetable matters.

This hair was, I conclude, invested with its calcareous coat, while in the stomach. The *rationale* of the whole process of formation of this singular body I conceive to be this:—The animal by licking himself, or others, accumulated a quantity of hair, which having assumed a globular form by the action of the buccal apparatus, passed into the stomach; hair not being susceptible to the digestive action of that viscus, it then remained till incruusted by an insoluble deposit, in the same manner that the urinary calculus is formed around its nucleus.

*A large Calculus.*—We have just learnt from a Knoxville paper, that Doctor Baker, of that city, had recently removed from a man aged 28, a stone measuring 13 by 5½ inches in its greater and lesser circumferences. Its weight, however, was only 5½ ounces, being of lime formation, which are generally light and porous. The operation was the *lateral*, and the calculus was broken in its extraction. The patient utterly refused any nourishment after it was performed, and died on the night of the third day.

*Milk a Purgative.*—During the night of the 4th, we saw an Italian who had received the *stiletto* of his comrade, near the junction of the eighth rib with its cartilage of the right side. Having had, up to the fourth day after the wound, but one motion from his bowels, a laxative dose of medicine was proposed; to which he objected, stating *milk* was his only physic. He took a common size tumbler of sweet milk, and at the next visit he had had 5 or 6 evacuations. We made particular inquiry on the subject, of himself and others around him, and were satisfied that this article of diet operates upon his bowels.

*Number of Medical Institutions in the United States.*—There are now, *thirty-seven* Medical Colleges in the United States, and we may add, *a few more of the same sort* still in contemplation.

*Partial Report from the great Battle of Buena Vista.*—We have just derived from a letter of our friend, Dr. Hitchcock of the United States Army, and formerly stationed at the Augusta Arsenal, the following items:—He has the supervision of eleven hospitals, eight American and three Mexican; in all 400 American and 200 Mexican patients.\* He cut out over sixty balls on the field of battle, and has performed eighteen capital operations, besides those of a minor character without number.

\* My report this morning, was 370 soldiers, 26 officers—total 396, Americans. Mexicans, 165 soldiers, 4 officers—total 169.

**National Medical Convention.**—At a meeting of the Delegates to the National Medical Convention from the city and county of Philadelphia, held at the Hall of the College of Physicians, March 9th, 1847, it was resolved to accept the polite offer made by the *Academy of Natural Sciences*, of the use of their spacious Hall for the meetings of the Convention; and the following committee was appointed to make the necessary arrangements for the meetings and deliberations of that body: Drs. Hays, Condie, Emerson, Fox, Bridges, Norris, Morris, West and Paul.

The above committee, in furtherance of the objects of their appointment, invite the delegates to the National Medical Convention to meet at the Hall of the Academy of Natural Sciences, west side of Broad-st., near Chesnut-st., on Wednesday, May 5th, at 10 o'clock, A. M.

The several standing committees appointed at the last Convention, are invited to meet at the same place on Monday morning, May 3rd, at 10 o'clock.

To facilitate intercourse between the delegates, they are invited to report themselves as soon after their arrival in Philadelphia as convenient, to the committee of reception and arrangement, named above, who will be at the Hall of the Academy of Natural Sciences on the 1st, 3rd, and 4th of May, from 10, A. M. to 3, P. M., and on the evening of the 4th of May, from 7 to 10 o'clock.

The secretaries of the associations who will be represented are requested to transmit, at an early day, the names of their delegates to the chairman of the committee, Dr. I. Hays.—[*Medical News*.]

**METEOROLOGICAL OBSERVATIONS, for March, 1847, at Augusta, Ga.** Latitude 33° 27' north—Longitude 4° 32' west Wash. Altitude above tide 152 feet.

| MAR. | Sun Rise. |           | 2, P. M. |           | WIND. | REMARKS.                        |
|------|-----------|-----------|----------|-----------|-------|---------------------------------|
|      | THER.     | BAR.      | THER.    | BAR.      |       |                                 |
| 1    | 32        | 29 90-100 | 60       | 29 91-100 | N. W. | Fair.                           |
| 2    | 31        | 30        | 57       | " 95-100  | E.    | Fair.                           |
| 3    | 36        | 29 92-100 | 55       | " 81-100  | E.    | Rain, } 95-100 of an inch.      |
| 4    | 47        | " 62-100  | 46       | " 64-100  | N.    | Rain, }                         |
| 5    | 42        | " 93-100  | 62       | 30 1-100  | N.    | Fair.                           |
| 6    | 36        | 30 9-100  | 64       | 30 5-100  | S. E. | Fair.                           |
| 7    | 46        | 30 3-100  | 67       | 29 92-100 | S. E. | Cloudy—sprinkle.                |
| 8    | 58        | 29 87-100 | 63       | " 87-100  | E.    | Cloudy—sprinkle.                |
| 9    | 53        | " 90-100  | 72       | " 90-100  | S.    | Cloudy.                         |
| 10   | 58        | " 89-100  | 80       | " 82-100  | S.    | Rain, } thunder, light.         |
| 11   | 63        | " 71-100  | 60       | " 63-100  | N. W. | Rain, } 1 inch and 35-100.      |
| 12   | 40        | " 57-100  | 41       | " 35-100  | N. E. | Rain, } Freshet in the river.   |
| 13   | 39        | " 54-100  | 46       | " 65-100  | N. W. | Cloudy.                         |
| 14   | 34        | " 87-100  | 48       | " 95-100  | N. W. | Cloudy.                         |
| 15   | 33        | 30 2-100  | 51       | 30 1-100  | N. W. | Fair—some clouds.               |
| 16   | 33        | 30 7-100  | 59       | 30 7-100  | N. W. | Fair—blow.                      |
| 17   | 30        | 29 33-100 | 54       | 30 6-100  | N. W. | Fair.                           |
| 18   | 33        | 30 3-100  | 68       | 30 7-100  | S. W. | Fair.                           |
| 19   | 42        | 30        | 72       | 30        | W.    | Fair.                           |
| 20   | 48        | 29 92-100 | 74       | 29 77-100 | S.    | Fair—blow, rain at night 90-100 |
| 21   | 52        | " 28-100  | 49       | " 33-100  | S. W. | Cloudy—blow.                    |
| 22   | 42        | " 58-100  | 66       | " 65-100  | S. W. | Fair.                           |
| 23   | 51        | " 69-100  | 58       | " 72-100  | S. W. | Cloudy.                         |
| 24   | 37        | " 88-100  | 64       | " 89-100  | W.    | Fair,                           |
| 25   | 38        | " 91-100  | 66       | " 87-100  | S.    | Fair, [blow.                    |
| 26   | 52        | " 43-100  | 47       | " 46-100  | W.    | Cloudy—rain last night 40-100,  |
| 27   | 33        | " 83-100  | 54       | " 89-100  | N. W. | Fair—blow.                      |
| 28   | 33        | 30 6-100  | 64       | 30 7-100  | S. W. | Fair.                           |
| 29   | 48        | 29 91-100 | 74       | 29 77-100 | S. W. | Cloudy—breeze.                  |
| 30   | 52        | " 75-100  | 70       | " 69-100  | S. W. | Cloudy—breeze.                  |
| 31   | 60        | " 6-100   | 74       | " 97-100  | N. W. | Fair—breeze.                    |

16 Fair days. Quantity of Rain 3 inches and 60-100. Wind East of N. and S. 6 days. West of do. 19 days.



# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—JUNE, 1847.

[No. 6.]

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE XVIII.

*Cases and Comments.* By H. V. WOOTEN, M. D., of Lowndesboro', Alabama.

CASE I. *Complicated Inguinal Hernia—Strangulation—Tobacco Injections—Operation, &c.*—I was called on the 14th of June, at 3 P. M., to see Alfred, a negro man aged 25, who was suffering with strangulated inguinal hernia. Two years previously, while lifting a heavy weight, the intestine came down, and had occasionally descended since that time, but never had before caused any serious inconvenience. Twenty-four hours before I saw him, he was seized with all the usual symptoms of strangulated hernia, of which a description is unnecessary. At the time of my visit he was suffering intense pain, and vomiting frequently: the tumor was about the size of a hen's egg, and lying directly over the course of the inguinal canal. I made immediate efforts to reduce it by the taxis, but failed; I bled him to approaching syncope—made another diligent effort, and again failed; warm enemata and all the usual appliances were resorted to in vain, and I could discover that the tumor was gradually increasing in size. I then determined to resort to tobacco injections—I prepared a pint of the infusion, made from a drachm of good tobacco, as directed by Liston, Gibson, &c., injected one half of it, and no effect being exhibited in thirty minutes, I threw up the other half: an hour elapsed, and no effect was yet produced. I then prepared another pint, made from two drachms of tobacco, and this pint was used in a similar manner to the other, and no effect was produced. After waiting a proper time, I prepared another pint made from three drachms of the tobacco, which I took from another lot,

(and it was certainly of full strength). I was here compelled to leave the case for a short time, and directed this pint of the infusion to be injected, one half at a time, thirty minutes apart, which was faithfully done; I returned to the case four hours after, which was at seven, A. M., on the 15th. The whole *three pints* of the infusion had been injected and *well retained*, and not the slightest effect produced by it. The pulse was hard, and very frequent, (140,) skin dry and warm, great restlessness and frequent stercoraceous vomiting. I again resorted to the taxis, assisted by the warm bath, but all to no purpose, and at 10 o'clock, A. M., I determined to operate. I should doubtless have operated earlier, but I had never performed the operation alone, and was out of reach of assistance, and of course felt reluctant to undertake it so long as there was any prospect of saving the patient otherwise. The lowest part of the tumor was not more than an inch below the external ring; thence it lay upwards and outwards, and was at this time, about twice as large as a hen's egg. There appeared neither testicle or cord on the hernial (left) side, but there was a contraction and adhesion of the scrotum which obstructed the descent of the hernia, and gave it an inclination in the direction above stated. The boy stated, that when he was "about half grown" he received an injury of the testicle on the side, which produced much swelling and pain for a long time, and that when it subsided the testicle and cord disappeared. It is useless to describe the operation, further than the peculiarities of the case require. I found the sac to contain an unusually large quantity of serous fluid, which was rather suspiciously dark colored; this was discharged by freely dividing the sac; I found the fold of intestine very livid, completely strangulated, and half-twisted upon itself. From the manner in which it was driven upward, over Poupart's ligament, and firmly banded by the fascia above, whilst the old adhesion confined its movements below, I began to understand the difficulty of reducing it by the taxis. On further examination, I found that it was strictured at both the external and internal rings, and the blighted cord adherent to the canal, from the external ring, inwards. The strictures were divided, and the intestine returned. The blighted testicle (about the size of a large bean) was found, adherent, just below the external ring, and immediately behind the protruded intestine. The double stricture, adhesion of the cord, and twisted condition of the intestine, rendered it somewhat difficult of reduction without an extraordinary degree of cutting. The wound was closed by suture

---

and dressed in the usual manner; an enema of warm gruel was ordered, and the patient left under the usual injunctions.

16th. Morning. Pulse, which after the operation yesterday was 140, was found at 135, and rather full, skin moist and rather warm, thirst, no appetite, complains of constant pain "like colic" just below umbilicus, no nausea since operation, and *no action yet of the bowels*, wound appears to be doing well; ordered mush and mustard poultice to the abdomen, and a free dose of castor oil. The oil operated in three hours, producing a free discharge of fæcal matter, but no particular appearance of the injections.

18th. Pulse 120, regular; no thirst, very little appetite, pain in abdomen still exists, but moderated, bowels acting regularly, wound appears to be healing well.

20th. Pulse 110, regular; pain in abdomen only occasional, appetite improved, bowels regular, wound united, but somewhat swollen, sutures coming away.

The patient continued to improve gradually, the pulse falling in frequency about five beats per day until it reached the natural standard, and on the 6th of July he was well, when I applied a truss and he got up.

I deem it unnecessary to give a more minute description of the above case, my object being simply to note such things as are peculiar, and therefore interesting;—amongst these are the peculiar relation of the parts arising from the old injury, and the consequent adhesions; the extraordinary tolerance of the tobacco injections, which were given in such large quantities, and actually absorbed; and the great arterial excitement which followed the operation, whilst the injury appeared to be rapidly recovering, and the patient otherwise doing well. I have heard of several hernial patients who perished from strangulation, under the eyes of physicians, who deeming the operation one of great difficulty and danger, refused to operate; and one object I have in publishing this case, is to encourage others to perform the operation, when they can do nothing else, rather than let their patients die, as they may see that it may be successful, even when all things are unfavorable, both as to case and operation. I had no professional assistance, no time to prepare myself, and no experience in such performances.

CASE II. *Bleeding with a Poisoned Lancet, and its consequences.*—In August, 1843, I was asked to see a negro boy, aged 9 years, who



was said to be strangely afflicted with abscesses ; I found his right arm, from his shoulder to the ends of his fingers, much swollen, with three discharging abscesses arising, one from each metacarpal space, one on the inner surface of the wrist, one on the under surface of the forearm, about midway, and a very large one over the inner condyle of the humerus—just over this, and about three lines from the orifice made by the lancet, was the cicatrix of a small abscess which had healed. This one, I was informed, was the first which appeared, and the general swelling of the arm which preceded the other, did not commence until after this had discharged, and was nearly well. The right side of the neck, from the shoulder to the ear, was much swollen, but no suppuration had taken place. His right leg and thigh were distended from the upper part of the thigh to the foot, and this latter was greatly swollen and had several abscesses already formed on it, one in the metatarsal region, and two between the toes. The right side of the trunk, from the shoulder to the hip, appeared perfectly well, there being in it neither soreness or swelling ; the whole of the left side was, and remained entirely sound. I was at great loss to account for the occurrence of so strange a disease. There was considerable febrile heat, thirst, loss of appetite, dry tongue, and arterial excitement, pulse 140, and firm. I bled him  $\text{ʒ}xii.$  and gave bi-tartrate of potash to purge. To the swollen parts, I applied poultices, after wetting them over with lead water. Two days after I saw him again, and found him in about the same condition I had left him, except that there was less fever, and the abscesses were discharging more freely. During my absence, in my endeavors to satisfy myself in relation to the nature of the disease, I remembered to have noticed the cicatrix of a recent puncture by a lancet, and it occurred to me, that the boy might have been poisoned in that way. I enquired, at my second visit, when he was bled, and his master informed me that he bled him about four days before the first little abscess, above mentioned, appeared. I then enquired, if he had ever used the lancet with which he bled him for any other purpose ; and after a little reflection, he answered, that on the evening before the bleeding, he opened a small bile on the neck of one of his children with the same lancet, which he remembered to have wiped well, as he thought, with a piece of cotton. I was then satisfied that the injury was produced by the poisoned lancet, and on enquiry, I learned, that the first small abscess which formed, was not opened freely, but after discharging a little from a spontaneous opening, it “shrank away and dried up.”

I now directed chloride of soda 30 drops, morning, noon and night, and charcoal poultices to the arm and leg.

In four days more, I discovered that the general cellular inflammation of both the leg and forearm, was rapidly resulting in suppuration. Several new openings formed, through the skin, which discharged great quantities of pus, and many of these openings were found to communicate with each other by the subcutaneous sinuses. Into these openings, I injected twice a day, by means of a glass syringe, tepid water containing an ounce of chloride of soda to the pint. The febrile symptoms had now given place to a cool skin, feeble and frequent pulse and general prostration. I gave decoction of sarsaparilla and sulphate of quinine in full doses three times a day, and continued charcoal poultices. It was now the twelfth day of the disease, counting from the time the general swelling of the arm commenced. This course of treatment was steadily pursued six days more. At the end of this time, the swelling had diminished considerably, and the discharge of matter was lessened, except at the wrist and ankle, and was of a more thin and transparent character, and the openings and sinuses had become slack and indolent. The general strength and appearance of the patient not materially changed. I now commenced injecting into the openings, once a day, a solution of the sulphate of quinine, 10 grains to the ounce, dissolved by nitric acid very slightly in excess, and using bandages moderately tight. The wrist and ankle *joints* were now evidently affected, and some of the naked bones could be distinctly felt with the probe. For the quinine heretofore given internally, I substituted the iodide of potassium in four grain doses, given in the decoction of sarsaparilla three times a day.

Four days after this, the patient's general appearance was better, and all the parts were in a much more healthy condition, except the wrist and ankle, which were now each discharging by several openings, a thick ichorous fluid, which gave off a very offensive odor. Finding one of the bones of the wrist loosened from its attachments, I extracted it with small forceps. It was the *Cunneiforme*. Continued same treatment, with charcoal poultices to wrist and ankle. The fourth day from this another bone, the *Pisiforme*, was extracted. The arm and leg were both much improved; the injections and bandages were continued, with the internal treatment. Three days after this, one of the tarsal bones, the *Naviculare*, was easily drawn out, and from that time, both ankle and wrist improved regularly, but

slowly. The boy was confined to his cot, in all, about three months, before the discharges all ceased, and the openings healed, during the remainder of which time the same course of treatment was continued, in principle, the remedies only varied to suit circumstances. After recovery, both arm and leg were rather hard and stiff, and the ankle and wrist joints disfigured of course, neither of which he will ever be able to use freely. His general health recovered entirely.

I give this case as a warning to the great number of persons who so indiscriminately and carelessly use their lancets, as well as for the other interesting points it presents. Why was the effect of the poison confined to the side in which it was introduced, and to only the extremities of that side?

The disease appeared to have a sort of regular course to run, and was perhaps very little influenced by remedies. In regard to the use of the quinine, topically, I must remark, that I have long been in the habit of using it as an application to indolent ulcers, and other discharging surfaces of that character, without thinking that there was any thing new in the practice. When I first commenced practice, and long before, the poultice, and decoction of *Peruvian bark*, were very commonly used in such cases, and the substitution of the more refined and potent alkaloid was very natural, yet it is spoken of recently, as a new mode of using this our great medicine.

**CASE III. Idiopathic Tetanus, unsuccessfully treated with Strychnine.**—On the 20th of February last, I visited Prince, a negro man, of stout, muscular habit, aged about 30 years. He had been complaining two days with pain in the back of his head and neck, and in the lumbar region of the spine. Pulse 90 and full; some thirst and other febrile symptoms, though light. He had been minding a coal-kiln, in very wet and cold weather, and I viewed it as a case very common to be seen under such circumstances. I bled him two pints, before the pulse softened, gave a cathartic, and directed a large blister to the upper part of the spinal column, if the pain continued after the operation of the medicine. I was informed next day that he was getting worse, and visited him again. While I was examining him, a violent and decided tetanic spasm seized him, and on enquiry, he informed me that he had had them about once in five hours, since he was first taken, though in a much milder form than the one I saw, until the night before this visit, when they increased greatly, both in frequency and violence. The spasms now came on



every hour with considerable violence, and the jaws were nearly closed. The cathartic had acted well, and the blister was fully drawn. I had recently been reading of the treatment of tetanus with strychnine very successfully in New York, and having no remedy on which I could rely with confidence, I determined to try it. I gave one-twelfth of a grain every two hours, to be extended to three or four hours, according to the effect produced.

On the 22nd, I found him decidedly under the influence of the medicine, and ceased giving it, but during the existence of the influence, the tetanic spasms continued with undisturbed violence, as they did after its cessation. I renewed the attack, so to speak, three several times, without the least benefit, but with increased pain and difficulty to the patient. After the third trial, (barely allowing the influence to remit between them,) I determined to abandon it, and used large doses of quinine and opium with some soothing effect. This was commenced on the 25th, and forty-eight hours afterwards the patient died.

Like Prof. P. F. Eve, I think there ought to be a Journal for fatal cases; and also that when new notions and new remedies are introduced, and urged into practice by much boast of success, that it is the duty of every member of the profession who tries them, and meets with disappointment, to make a report of the facts, so that others may have the advantage of his experience, on what may be very inviting, but dangerous ground. I have known successful cases reported, and others of equal importance, in which as great skill was displayed by the practitioner, withheld, for no other apparent reason, than a want of success. When we know these things to be so, we can but look upon the reported success, as only a self-laudatory advertisement, to attract customers. A surgeon may perform a similar operation on each of two patients, an operation requiring both courage and skill of a high degree, but one patient will die, and the other get well, and the successful case will be conspicuously set forth in the Journals, and even in books, to invite the less bold, and perhaps less skilful operator, to venture upon dangerous ground, which he would not do were both cases set before him.

I will close this miscellaneous paper, with a remark or two on

*Trismus Nascentium*.—About a year ago, a letter of mine, on this subject, was published in the New Orleans Journal, and copied in several others. In that letter I stated that I had never seen a white child afflicted with the disease. Since then, however, I have seen

two, both of them finely developed male children. Besides these, I have seen four cases of negro children suffer and die from it, as did also the whites. Having previously found no successful remedy for it, I was very glad to meet with Dr. Sims' view of the disease, but have been in every instance disappointed in deriving any practical benefit from it. One of the white children had decided depression of the occiput, and also tumidity and tenderness of the umbilicus; with this exception, the heads were all quite symmetrical and as firm as is natural, presenting no evidence of unusual displacement, or other injury about the head; nor did there appear to be *any* visible injury about them whatever. In every instance, I made faithful trial of the "soft pillow of feathers" and keeping "the child on its side on the pillow"; but they all died. So that I still feel as much in the dark in regard to the cause of the disease, as before, and, if possible, more so, in regard to a reliable treatment. I believe that Dr. S's plan of laying them on the side, and changing the position pretty often, is a very good one, in this or any other disease, and in fact where there is no disease at all. One of the cases above referred to, was kept on its side with special care, and the sides changed regularly, from its birth, but the disease appeared on the seventh day, and it died on the ninth.

The reader will, of course, not understand me as attempting to report any of the foregoing cases with that accuracy of detail which is necessary in a full illustration of the disease and treatment. My object has been simply to present certain points of *special* interest in the several diseases, or cases of disease; taking it for granted, that all readers will have read, and very probably seen, much better expositions of the *general* character of the diseases, as well as the remedies employed, than any which I could offer them.

---

ARTICLE XIX.

*Treatment of Pneumonia.* By JOHN DAVIS, M. D., of Abbeville C. H., South Carolina.

It is not my intention to endeavor to add any thing new, either as to the history, pathology, or treatment of pneumonia; but merely to shew what has been my practice and experience, in a considerable number of cases which have come under my care during the last five years. During this time this disease has prevailed, and is at this

moment prevailing, more or less extensively throughout this and some of the adjoining districts, and proving fatal (as near as my means of observation go.) in about one-fifth the cases.

The cases which I have seen, have generally been ushered in with a chill, and the ordinary symptoms of what is often called, "taking cold;" coryza, cough, violent oppression of the chest. In some cases rheumatic symptoms predominate, with severe pain in the chest, back and limbs. Again, I have seen the head very much affected, the patient complaining of great debility and oppression throughout the whole course of the disease. The pulse, even, in the milder cases, is very much affected—the heart sympathizing largely with the suffering of the other organs. The skin is almost invariably found hot and dry, with great thirst, red tongue, which in two or three days, if there is no change for the better, becomes dry, furred, and of a dark muddy appearance. The fever in *all* the cases, which I have seen, has been remittent, and in some few cases, especially during convalescence, intermittent. The bowels in the main, have been either very difficult or unnaturally easy to move.

It is generally conceded that pneumonia is an active, inflammatory disease; but to say that the profession is unanimous as to the surest and safest means of its cure, would not be correct; for while some rely almost entirely for success on the free use of the lancet, others reject it almost entirely, as unsafe, whilst others again resort to it pretty constantly, but so sparingly as to derive little or no benefit from it.

When the breathing is difficult, skin dry and hot, flushed face, quick and tense pulse, I invariably, under all other circumstances, draw blood from the arm till there is a decided impression made upon the system, regardless of the stage of the disease—the seeming prostration of the vital powers, or the influence of epidemic agency; for this is a disease of a rapidly disorganizing inflammation, of a very vital and important organ of the system, and if suffered to thoroughly develop itself, will, in nine cases out of ten, prove fatal. In fact, I have found the lancet, in the more violent cases, when pushed to its fullest extent, not only entirely safe, but the only remedy to be relied on. It relaxes the lungs, produces a favorable and salutary change on the pulmonic inflammation, removes the overwhelming congestion and consequent oppression, facilitates the operation of expectorants, (tart. ant.) and, in short, arouses all the vital powers of the system, to the more effectual action of all the remedies



that may follow in the train. In cases where the subject is of a stout and robust constitution, it may, and indeed should, often be resorted to, even during the fifth or sixth day succeeding the attack. Even at this advanced stage of the disease, if the skin is dry and hot, pulse oppressed, with pain in the chest, I am in the habit of taking as much blood as will relieve the pain and sensation of congestion in the lungs, which may be known by requesting the patient to make a deep inspiration, from time to time, during the operation. Here I have found it difficult to produce fainting, and I continue the bleeding till the pain is removed, regardless of the quantity taken; when the pulse will become more vigorous, the surface moist, followed with an obvious abatement of the violence of all the symptoms. But I have often known injury done here, by not taking a sufficient quantity to afford immediate and prompt relief to the affected lung, which is not to be judged of by the number of ounces abstracted, nor, in all cases, by the pulse, for the pulse will often rise and become, as it were, natural, in some cases under the lancet, before the pain and other violent symptoms subside; and if we stop the blood too soon, it will again, in the course of an hour or two, become oppressed, and no benefit is gained, but often much injury is done. If necessary, I continue the bleeding till the pulse flutter under the finger and syncope supervenes, which I have found will, in a large majority of cases, check the further progress of the disease, followed by free expectoration of the desired character; or it has placed the disease so completely under my control as to be easily managed by counter-irritation and well chosen expectorants, &c. The intense congestion, or capillary paralysis of the lungs, in this affection, always succeeds more or less inflammation, and if it is extensible and suffered to continue three or four days, it will, in a large number of cases, result in fatal disorganization of the structure of the lungs. So our duty is plain, and we should not be deterred from the discharge of it by the bug-bear hobby of debility, upon which hundreds and thousands have ridden into an untimely grave. I know it is sometimes contended that "the fluids are too stagnant to be drained off by venesection." This I confess often proves to be the case, but it is owing to nothing but the postponing of the lancet till too late, or otherwise, if resorted to in time, too sparingly so. I never have seen the debility and exhaustion, so much harped upon by medical gentlemen, follow active bleeding in this disease; on the contrary, I have almost always found free venesection to throw off, as it were, instead of producing, the over-

whelming oppression and consequent debility, so peculiarly frightening to some practitioners. The strength is not gone—it is still in the system, and will show itself if the obstruction and oppression of the lungs be removed; and till it is removed there are no well grounded hopes of recovery. Is it not fair to conclude, if bleeding will not remove the congestion, even in those desperate cases, that all other remedies usually employed will fail to do so, and the disease progress rapidly to a fatal termination? What can stimulants do in this state of the lungs? *What can cupping, blistering, mustard, and purgatives, ALL do?* Nothing. Shall we stand still, without making an effort to save? Under the most adverse circumstances in which this disease can present itself, if the pulse be not very quick and weak, and the sensibility is considerable, skin hot, with even the fierce, wild look of the eye, and delirium at times, noisy, and the face hectically flushed, if there be pain in the chest, it may still be altogether possible to prevent the disorganization of the lungs from advancing, by bloodletting. In a proper knowledge here, however, it must be borne in mind, consists much of the skill, judgment and success, in the treatment of those desperate cases. The practitioner should know how much is requisite to subdue the threatening symptoms and to effect a cure, with the least expense to the constitution of the patient, and I am thoroughly convinced from my experience in bleeding, in those even seemingly hopeless cases, that there is not half so much danger in bleeding the patient to death, as there is in the certainty of bleeding the disease to death. In short, I have never sheathed the lancet in this disease, and resorted to stimulants, before the disease was subdued or rendered manageable by other means, unless there was great depression, loss of energy in the vascular system, as well as in the nervous and sensorial, indicated by an extremely feeble, quick, and easily compressed pulse, skin cool and perspiring, attended with low muttering incoherence. Here I have frequently derived great benefit from brandy, opium and quinine, where further bleeding would not be admissible.

From the few remarks I have made in relation to the treatment of pneumonia, one might concede that the lancet is all I use. *I do look upon it as my chief reliance*; but tartar emetic often completes what the lancet has commenced. If it were not for the tartar emetic, I would often bleed even more fully, in some cases, than I do. Given in doses sufficiently large to produce a slightly nauseating effect, this article is of undoubted utility in pneumonia, as well as all other pul-

monic inflammations. From my experience with it in those diseases, it seems to have rather a specific tendency than otherwise. It also seems to combine with its antiphlogistic effect a very happy and obvious expectorant influence, in loosening the tenacious secretion from the lungs, which are freely thrown up, very much to the relief of the patient. It should never be given, however, where there is much irritability of the mucous membrane of the bowels. In fact, it should not be continued too long in any case in this climate, for fear it may produce such a state of the bowels, which if it does, we may expect the patient will die in despite of every thing.

The above, with the occasional use of quinine, brandy, gentle purgation, expectorants, with counter-irritation, &c., after the disease has been *mainly* subdued by venesection, has been my practice for the last five years, during which time, I know, I have treated, in all, at least ninety or a hundred well marked cases, with success.

---

ARTICLE XX.

*A brief notice of a highly Malignant Disease.* By B. H. PEARSON, M. D., of Powelton, Ga.

Dec. 5, 1846, was called to see Green, a boy about 13 years of age, belonging to the Rev. Mr. ———. On or about the 1st of October he had a slight attack of fever, from which he gradually recovered under domestic prescriptions, so as to be able to resume his work on the plantation. He seemed, however, not to recover strength, but appeared weaker every day, until he finally left off work again, although still not confined to the house. He complained of great prostration and want of appetite. This, his master attributed to his having over-strained himself in carrying home his cotton, being extremely active, and picking more cotton than he could well carry; and for which he prescribed an occasional dose of Cook's pills, and tartar emetic ointment to the spinal column. I found him greatly emaciated; pulse extremely feeble, 175, rather irregular; the sounds of the heart were very weak, yet natural; respiration was feeble; no abnormal sounds; there was slight cough, with frothy expectoration in small quantities; appetite much impaired; bowels a little loose; stools dark; slight tenderness of the lower cervical vertebræ. Prescribe blue mass gr. j. at night, cups over the cervical vertebræ, and an easily assimilating diet.



9th. Green says he is better, which continued to be his answer, when asked how he was, until the day of his death. A careful examination showed *slight* dullness under the left clavicle; bowels natural; no other change in the symptoms. Upon enquiry, I find he descended from syphilitic parentage, his grandfather, on his mother's side, having had that disease; and also that most of the male children from the same descent died in infancy. Prescribe hydriodate of potash grs. ijss. three times a day, which was gradually increased to grs. iv. This was persevered in for about three weeks, when, seeing no improvement, but rather a gradual increase of his cough and his weakness, a resort was had to tonics, quinine, and stimulating expectorants, but with no benefit except relieving his cough a little at night.

Feb. 14. A neighboring physician was called in, who pronounced his disease to depend on torpidity of the nutritive system. Prescribed hydriodate of potash grs. iij. three times a day, under which prescription he remained until his death, which took place the last of February, being confined to his bed but three or four days before he died. He complained of no pain except a neuralgic affection of his knees for about a fortnight, and soreness of his hips from lying in bed. His bowels remained natural to the last.

*Post mortem examination fifteen hours after death.* Body extremely emaciated. Upon laying open the cavity of the thorax, the left pleura was found adherent throughout its whole extent; the heart and lung upon this side was perfectly studded with tubercles, of a cheese-like consistency, about the size of small buck-shot; the right lung was tuberculous, but not to the same extent as the left; a few tubercles on the upper surface of the liver, otherwise it was tolerably healthy; the spleen and peritoneum were equally affected; the pancreas, stomach and bowels healthy.

This case is given as an example of several occurring in the same family, four of whom have died, one is now at the point of death, and the disease seems to be extending to other families. I have not had an opportunity of seeing those sick in other families yet, but doubt not from the description of the symptoms that they are affected in the same way.

Thus far every one who has been attacked has died in a time varying from five weeks to four months—their symptoms varying in some particulars. One's bowels were badly affected for several weeks before death. In another, a large vomica burst, and consid-

erable matter was coughed up on the day preceding her death, which was probably the immediate cause of it. They all seemed to be taken sick by surprise, and died thinking they were getting well, except the mother of the family, who lived but five weeks after she first began to complain, and but two after she first felt sick enough to take to her bed, and she supposed she was "tricked."

Dr. Terrel, of Sparta, recommends the use of iodine to the remaining members of the family, as the only means of preventing the extension of the disease. Possibly it might be of service if used in season. But the probability is, that the disease may be advanced to an incurable state before the first symptoms appear,—and besides it is so insidious in its approach, that it is some time before the patient knows the nature of the attack. A disease similar to this prevailed some years ago in Maj. ———'s family, of Wilkes county, and between twenty and thirty died. I hear also it is prevailing in Tennessee, to an alarming extent in some neighborhoods.

---

ARTICLE XXI.

*Experiments on Rabbits with Opium and its preparations.* By  
ERWIN H. OAKMAN, M. D., of Columbia county, Ga.

Having observed in the February No. of this Journal, for the present year, an extract (by M. Lafarque) in the Edinburgh Medical and Surgical Journal, showing the harmless effects of acet. morphine upon Rabbits, and feeling rather inclined to doubt the accuracy of his statements—as the explanation hinted at was not altogether satisfactory—I thought I would make a few experiments upon these animals, to satisfy myself more completely, and give the result of my investigations to my professional brethren.

To No. 1, I gave within the space of five hours, four and a half grs. of pulv. opium, and one gr. of sulph. morphine. Five hours after the last dose was given, the appearance of the animal and pulsation of its heart, were the same as when the first dose was given. It died during the night, but not from the narcotic.

To No. 2, gave twenty grs. of pulv. opium, within the space of eight hours. No more effect produced than if it had taken the same quantity of its ordinary food.

To No. 3 and 4, four grains each of sulph. morphine at one dose. No effect produced.

To No. 5, four grs. of acet. morphine at one dose. No effect produced.

No 1 was very feeble and lean, with a fracture of one hind leg. Death in this case I think was produced from the irritation of the wound, together with want of food, it having been kept two or three days without food, before coming into my possession.

These experiments, so far as they go, prove the assertion of M. Lafarque.

I cannot account for the exemption of these animals from the influence of this powerful narcotic, unless opium produces its peculiar effects in proportion to intellectual endowment. Contrast the mental capacity of man with that of a rabbit—also the effects of opium upon each, and the exemption of these animals from the influence of opium ceases to be a wonder.

---

## PART II.—REVIEWS AND EXTRACTS.

### ARTICLE XXII.

*The Principles and Practice of Ophthalmic Medicine and Surgery.*

By T. WHARTON JONES, F. R. S., Lecturer on Anatomy, Physiology and Pathology, at the Charing Cross Hospital, &c., &c.,—with one hundred and two illustrations. Edited by Isaac Hays, M. D., Surgeon to Wills Hospital, &c., pp. 509. Philadelphia: Lea and Blanchard. 1847.

By the American Editor, we are informed that this work is one of a series of Manuals designed chiefly for students, and those reviewing, to obtain in a small compass, the principles and practice of the medical profession. It may not be uninteresting to the reader to know that the authors secured to co-operate in this undertaking, are all fellows of the Royal Society; and the volumes issued up to the present date, are—Surgery, by Mr. Ferguson; Physiology, by Dr. Carpenter; Anatomy, by Mr. Erasmus Wilson; Medical Jurisprudence, by Mr. Taylor; Chemistry, by Dr. Fowns; Materia Medica and Therapeutics, by Dr. Royle; Natural Philosophy, by Dr. Golding Bird; and lastly, the one now about to be noticed. The series thus far have proved to be most valuable works on the respective subjects of which they treat, and most of them leave but little more to be desired, so complete are they, and so numerous, that as manuals



they excel all similar enterprises. He who undertakes to write a single volume on Medicine or Surgery must fail, so vast is the science before him; but when a number are engaged, each taking a particular department, but all co-operating and harmonizing to obtain the same object, then *manuals* may become not only respectable, but be sought after by those desiring to review at a glance, or examine in a small compass, the important facts on a given subject.

Jones's Ophthalmic Medicine and Surgery, is issued by the American publishers in a large Duodecimo volume, and in a style worthy the matter it contains. The author states his aim to have been to produce a text-book for students, and a book of reference for practitioners. To make his subject more clear, definite and precise, he has resorted to illustrations—hence the numerous wood-cuts contained in this manual. And as ophthalmic medicine is included with the operations on the eye, it also abounds with many valuable prescriptions.

The work is divided into XI. Chapters, each one having its separate sections. The introduction embraces the peculiarities, the history and literature of ophthalmic medicine and surgery. We are no great friends to pictures of diseases; an instrument may be exhibited by a plate very correctly, provided it be not complicated, but illustrations of pathological conditions generally fall far below the original thing itself. Our ideas on this subject have not been changed by an examination of the wood engravings in this manual. These, while they have added to its expense, have not enhanced its value in proportion as designed they should. We have no objections to the cuts of instruments and descriptions of operations; we allude alone to the attempted illustrations of ophthalmic diseases by plates.

The style of our author is concise, such as it should be in a manual. All speculation is carefully avoided, and the facts plainly presented to the reader; and to facilitate reference each paragraph is numbered.

We give the commencement of the first chapter, that our readers may judge of the character of this work.

*“Ophthalmoscopy, or exploration of the eyes in order to a diagnosis.—This exploration is of two kinds, viz., subjective and objective. The subjective exploration of the eye comprehends an inquiry into the patient's sensations in the affected organ, such as pain, tolerance of light, and state of vision. The objective exploration is directed towards the morbid conditions which admit of being perceived by the surgeon himself.*

*“Subjective examination of the eyes. Pain; its seat and character.*—Pain, as if a foreign body were in the eye, with itchininess and smarting of the edges of the eyelids, and sometimes pain across the forehead, indicates conjunctival inflammation. Rheumatic pain, around the orbit, or in the temples, occurring in nocturnal paroxysms, points to inflammatory congestion of the sclerotica, as in iritis, &c. Deep-distending pain in the eyeball, with or without circumorbital or temporal pain, marks deep internal inflammation of the eye.

*“Intolerance of light, or photophobia.*—Intolerance of light, in a greater or less degree, is a very frequent symptom in the ophthalmiæ; but that in which it occurs in the highest degree is the scrofulous ophthalmia of children. Intolerance of light may also occur in other affections not coming under the head of the ophthalmiæ.

*“State of vision.*—Is the sight short (*myopia*), or long (*presbyopia*)? The pupil being greatly dilated, (*mydriasis*), with indistinctness of vision, are objects seen more distinctly by looking through a small aperture in a card, blackened on the surface, held next the eye? Are objects seen distorted? Are they seen of another than their true colour, surrounded by a colored halo (*chroopsia*)? Is vision dim? if so, is it defective by day (*day-blindness*)? or it is defective by night (*night-blindness*)? or it is defective both by day and night? Do the eyes soon become fatigued, and the vision confused, when near objects are examined (*asthenopia*)? Are objects seen double (*diplopia*)? And if so, is the vision double when one eye only is used? or is it double only when both eyes are used? Is the half or a part of objects only seen (*hemiopia*, &c.)? Is there an appearance of motes or flies floating in the field of vision (*muscæ volitantes*)? Do objects continue to appear before the eyes, but of an opposite tint or colour, for a few seconds after they are no longer looked at (*ocular spectra*)? Are flashes and scintillations of light ever seen (*photopsia*)? Such are the principal questions which may suggest themselves in the course of an inquiry into the state of vision.

*“Objective exploration of the eyes*—In this exploration, the eyes should be first examined without touching them. This it is of importance to do, especially in inflammations, in order to avoid causing an increased determination of blood, lachrymation, &c., which in such cases are apt to be occasioned by the slightest touch, and which might complicate the appearance natural to the inflammation, and give an erroneous view of the nature of the case. In an hospital, the pupils should not, on any account, be permitted to touch the eyes of a patient, before the surgeon has made his examination.

*“The surgeon should, in succession, glance at the eyebrows and orbital margins, the eyelids and their movements, the borders of the eyelids and state of the eyelashes, and the corners of the eyes, and note the presence or absence of lachrymation, the form and appearance of the eyeballs generally—their size and degree of prominence—movements and direction—the correspondence of their axes; the*

appearance and colour of the white of the eye, the appearance of the cornea, the colour of the iris, and the state of the pupil.

“Besides this direct examination of the eyes themselves, the general bearing of the patient, and the expression of his features should be carefully observed. The information thus obtained will sometimes reveal the nature of the case, or will guide in the further exploration of it. By the general bearing of the patient, and the expression of his features, it will be seen, for example, if he is affected with intolerance of light—if he be blind from amaurosis, or blind from cataract.

“The patient, intolerant of light, keeps his head bent down, and covers his eyes with his hands, in order to protect them from the light. The eyelids are spasmodically closed, and at the same time the eyebrows are knit and depressed, and the cheeks drawn up, so that there is great distortion of the whole features. There is greater or less lachrymation.

“Whilst the confirmedly amaurotic patient moves about with an air of uncertainty, his head erect, and the eyes wide open—not converged and fixed on any object, but staring forward as if on vacancy—perhaps moving about in a vacillating manner or squinting, the cataractous patient is more steady in his gait; and with his head bent forwards, his eyes half-closed, his eyebrows knit and depressed, he moves and directs the eyes naturally and steadily, in an exploratory manner.

“This survey, constituting the first step in the objective exploration of the eye, may be taken during the time the patient is coming into the room, relating the history of his case, and describing his present sensations in the eyes. In the subsequent steps of the objective exploration, attention should be carefully directed to the relations which may exist between the subjective and objective phenomena of the case.

“Most probably the result of the preceding objective survey, in conjunction with the subjective examination, will have been such as at once to direct the practitioner to the part affected, on which he will accordingly fix his attention, and subject it to the necessary exploration in order to an exact diagnosis, not neglecting, however, to take a rapid, but methodical survey of the other parts of the eye, lest anything should be overlooked. The account of the mode of conducting the objective exploration of the different parts of the eye in detail, to which I now proceed, will necessarily include references to the principal morbid conditions of the organ.”

The author then proceeds to the exploration of the eyebrows, eyelids, conjunctiva, lachrymal organs, movements of the eyeballs, state of the cornea, state of the iris and pupil, &c., &c.

In regard to the mooted question, whether the conjunctiva covers the cornea, he says :

“The ocular conjunctiva is connected to the sclerotica underneath



by cellular tissue loose enough to allow the former to slide somewhat upon the latter. At the margin of the cornea the cellulo-vascular and nervous basis of the sclerotic conjunctiva stops—what of the conjunctiva extends over the cornea being reduced to the epithelium. This epithelium, however, forms a thicker layer than on the sclerotic conjunctiva. It is, of course, intimately adherent to the proper substance of the cornea.”

To distinguish whether the redness, that almost pathognomonic symptom of inflammation, be situated in the conjunctiva or sclerotica, he illustrates the question by a diagram, which we confess is very happily done. This cut represents sclerotic vascularity by straight faint lines on one side, and conjunctival vascularity by larger, deeper colored and tortuous irregular lines on the other. The text is,

“*Conjunctival vascularity—Sclerotic vascularity.*—If the white of the eye is red from inflammatory congestion, it becomes a question whether the congestion be in the conjunctiva or sclerotica.—In conjunctival inflammation, the vessels of the sclerotic conjunctiva are large, somewhat tortuous, and arranged in a reticular manner; the color is scarlet, or brick red, and it may be deeper towards the orbit, but more or less shaded off towards the cornea. In sclerotic injection, the redness is in the form of a pink or lake-colored zone, encircling the cornea; the injected vessels being very minute, and disposed in straight radiating lines, as if from its margin, where the tint is deeper, whilst it is shaded off, and disappears towards the orbit, the converse of what occurs in the injection attending conjunctival inflammation. The seat of the injected vessels, whether in the sclerotic conjunctiva or in or on the sclerotica itself, is easily proved, supposing any doubt exists, by making the conjunctiva slide on the sclerotica, when the vessels, if seated in the conjunctiva, will be observed to move along with it, whereas, if seated in the sclerotica, or closely applied to its surface, they will remain stationary. When both conjunctiva and sclerotica are injected at the same time, the pink hair-like vessels of the sclerotica are seen stationary through the larger meshes of the sliding conjunctiva. But when the conjunctiva is very much injected, the state of the sclerotica cannot be seen.”

Our author sets down the usual diameter of the cornea at  $\frac{9}{10}$ th of an inch transversely, and a little less than this vertically.

For the artificial dilatation of the pupil, he speaks more favorably of the solution (ext. belladonn. grs. xx., aq. destillat.  $\text{ʒi.}$ , solve et per linteam cola,) dropped into the eye, than the same extract reduced to the consistence of honey, smeared upon the eyebrow and outside of the eyelids. He also alludes to the active principles (atropine and hyoscyamine,) of belladonna and hyoscyamus, originally recommended, he says, by Dr. Reisinger. With the solution of the com-

mon ext. belladonna, he says the pupil is dilated in a quarter of an hour or so. Having recently been embarrassed by the tardy dilatation of the pupil in more cases than one, and wherein both the solution and paste of this preparation, were freely applied, we have obtained the ext. of belladonna from various sources, and in no instance have we succeeded in effecting a dilatation in the time mentioned by Mr. Jones. We prefer smearing the paste over the eyelids and rubbing it into the eyebrow, two hours before operating, for cataract. To the solution we object, because most of the extracts contain some gritty particles, and the article itself irritates the conjunctiva.

Of the applications of remedial agents to the eyes, he thus speaks:

“*Cold lotions.*—Cold spring water is the best cold lotion. It is applied by means of compresses of old linen or lint, which should be broad enough to extend over the neighbouring parts as well as over the eye, but not so heavy as to press unpleasantly. When once commenced, the application of the cold lotion requires to be assiduously kept up as long as is necessary, one compress, as soon as it becomes warm, being replaced by another just taken out of the water.

“*Cold douche bath.*—This consists in a fine stream of cold spring water allowed to play on the closed eye and neighboring parts. The application may be continued for about a quarter of an hour at a time. There are particular douche apparatuses. A simple form of one may be readily constructed with a glass tube of the thickness of a barometer tube, and from three to three and a half feet long, bent like a syphon six inches from one end, whilst at the other it is drawn out small, and also bent, but only for about two inches; the short limb of the syphon being immersed in a vessel of water placed at a convenient height, the air is sucked out at the small end, when a fine stream of water will issue from it.”

“*Warm cataplasms and fomentations.*—As applications to the eye, fomentations are much more convenient and elegant than poultices. Warm water simply may be used for the purpose, or chamomile decoction, poppy decoction, and the like. The application is made by means of compresses, as just described for cold lotions. The application requires only to be made occasionally, and that merely for a period of from five minutes to a quarter of an hour at a time. Warm cataplasms and fomentations should never be allowed to become cold on the eyes. After their removal, the eyes are to be gently dried with a soft linen cloth, and care taken that they be not exposed to a draught of air.”

“*Eye-waters properly so called,* are the weaker solutions, and are used to bathe the eye occasionally in the course of the day. The fluid is to be put into a cup in sufficient quantity and made tepid. The patient, holding his head over the vessel, is to lave his eye with the water by means of a piece of sponge or soft linen rag; and after this has been done for a few minutes, some of the fluid may be drop-

ped fairly into the eye by an assistant squeezing the soaked rag over it, while the patient lies on his back, and endeavours to hold his eyelids apart. After this, the eye may be laved again for a minute or so, and then carefully dried with a soft linen cloth. An eye-glass is not to be recommended.

“A principal object in the process above described is to remove any discharge from the eyes. The blennorrhœal ophthalmia, when the eyelids are enormously swollen and cannot be opened, it may be necessary to inject the eye-water between the eyelids, after they have been cleansed as much as possible by means of the bathing simply. In using the syringe, however, care must be taken not to injure the patient’s eye by pressure or the like, and on the other hand, the operator should guard his own eyes from receiving any spirt of matter.”

His examples of eye-waters are—

R. Belladonnæ extract 3ss., Aquæ puræ ʒviij. Solve et per linteam cola. *Sig.* Sedative eye-water, to be used tepid.

R. Aluminis gr. xvj., Aquæ ros. ʒviij. Solve. Ft. aqua ophthalmica.

R. Sulphat. zinci gr. xvj., Aquæ ros. ʒviij., Acid. sulph. dilut. gr. xvj. F. Solutio pro aqua ophthalmica.

R. Hydrarg. bichlorid. gr. j., Ammoniaæ hydrochlorat gr. vj, Aq. ros. ʒviij. Solve, &c.

R. Lapidis divini\* gr. xvj., Aquæ destillat. ʒj. Solve et cola.

Colaturæ adde aquæ rosarum ʒviij. Misce, &c. *Sig.* Eye-water.

“N. B. To any of the four last solutions, a drachm of vinum opii may be added. The following may be mentioned as directions for use:—To a wineglassful, add as much hot water as will make the whole lukewarm. With the quantity thus prepared, the eyes are to be bathed as thus directed.

“Drops.—These may be applied by means of a quill or glass tube, but a large camel’s hair pencil will be found the most convenient instrument. It is to be remembered, however, that to avoid accidents, each patient should have a separate pencil, which ought to be well washed every time it is used. The lower eyelid being slightly everted, its inner surface is to be touched with the loaded pencil, when the fluid will be immediately drawn off and diffused over the lower part of the conjunctiva. Pains must also be taken to allow the drop to make its way underneath the upper eyelid by drawing this from contact with the eyeball, and then moving it slightly up and down. It is frequently necessary to evert the upper eyelid, and to pencil its conjunctival surface directly.

“In order to apply drops to the eye of a child with the least possi-

\* Take Sulph. of Copper, Nitrate of Potash and Alum, each xvi. parts. Triturate together and liquify in a glass vessel over a sand bath. After they are melted, add pulverised camphor 1 part. Mix. When the mass is cool, it is known under the name of the divine stone. (Trans. Edts. S. M. and S. J.)



ble trouble, the surgeon is to seat himself on a chair, with a towel, folded longways, laid across his knees. On another chair, on the surgeon's left hand, and a little in front of him, the nurse with the child sits in such a way, that when she lays the child across her lap, its head may be received on the towel, and between the knees of the surgeon, and thus held steadily. The nurse confining the hands and arms of the child, the surgeon easily draws down the lower eyelid and drops in the fluid; he then draws the upper eyelid up a little, and also from contact with the eyeball, in order to allow the drop to get underneath. The eyelids are then alternately to be drawn from each other, and made to approach so as to favor the spreading of the fluid over the whole conjunctival surface."

"Examples of eye drops.

"Vinum opii, pure, or diluted with one or two waters, is often used for dropping in the eye.

R. Nitratis argenti gr. iv.—x., Aquæ destillatæ ʒj. Solve.

R. Hydrarg. bichlorid. gr. ss., Aquæ destillatæ ʒvij. Solve et cola.  
Colaturæ adde vini opii ʒj. Mince.

R. Lapidis divini gr. v.—x., Aquæ destillatæ ʒvij. Solve et cola.  
Colaturæ adde vini opii ʒj. Minse.

R. Extract. belladonnæ gr. xx., Aquæ destillatæ ʒj. Solve et per linteam cola.

R. Atropiæ sulphat. gr. ij.—iv., Aquæ destillatæ ʒj. F. Solutio.

Janin's ointment for the eyes, he says, is composed as follows:

R. Præcipitat. alb. gr. xv., Tutix præparat, Boli armen. ppt. aa ʒss.,  
Adip. suilli ʒi.—ʒij. M. exactissime: ft. ungt. ophthalmicum.

For the local abstraction of blood from the eyes, or rather its neighborhood, he recommends half a dozen leeches as the average number to be applied for an adult. Dr. Hays, the American editor, in a note, says the author alludes to the European leech, but of the domestic variety fifty or sixty may be used. This must be a mistake. One leech applied to the temple, we have known to cause death to an infant, and we confess a dozen ought to produce sufficient effect in almost any case of ophthalmia.

To remove sparks, as they are called, or detached portions of iron from the oculo-palpebral space, he recommends a toothpick or a small silver spatula. We employ, as Dr. Hays does for this purpose, a cataract needle. Indeed, under another section the author also recommends the same instrument. We have never yet seen good result in a single instance from the magnet. A diluted solution of tincture of iodine, may oxydize the metal and facilitate its extraction, as has been suggested; but delay might be very injurious under these circumstances.

Besides sweet oil mentioned in the text to decompose caustic and alkaline substances introduced between the eyelids, diluted acetic acid has also been proposed.

We pass over the author's views regarding inflammation in general, because not one by any means peculiar to the eye itself. We may be permitted, however, to extract the four following postulates, which require no comment:

"1. That the constriction and dilatation of the calibre of the small arteries at least, if not of the capillaries, are owing to contraction and relaxation of their walls by virtue of the vital endowment of contractility or tonicity which they possess; the exercise of which contractility is dependent on nervous influence.

"2. That the constant moderate exercise of this endowment on which the ordinary state of tone of the vessels depends, is determined by the constant moderate discharge of nervous influence.

"3. That whilst a greater state of constriction of the vessels than ordinary is owing to an increased discharge of nervous influence, the relaxation, atony, or paralysis of the walls of the vessels on which their dilatation depends, is owing to the suspension of nervous influence.

"4. That the relaxation, with dilatation of the vessels from suspension of nervous influence, is the precursor of the retarded flow of blood and stagnation."

Of ophthalmic inflammation in general, the author makes the following orders, viz:

"1. OPTHALMIA EXTERNA. 2. OPTHALMIA INTERNA ANTERIOR. 3. OPTHALMIA INTERNA POSTERIOR. 4. PANOPHTHALMITIS.

"The genera of these orders are distinguished and designated according to the particular structure which is the chief seat of the inflammation—I say the chief seat, for the inflammation is seldom confined altogether to a single structure.

"Ophthalmia externa thus comprehends, according as the conjunctiva, sclerotica, or cornea is the chief seat of the inflammation, the genera *Conjunctivitis*, *Sclerotitis*, *Corneitis*.

"Ophthalmia interna anterior, on the same principle, comprehends the genera *Aquo-capsulitis*, *Iritis*, *Crystallino-capsulitis anterior*.

"Ophthalmia interna posterior, again, comprehends the genera *Choroiditis*, *Retinitis*, *Vitreo-capsulitis*, *Crystallino-cepsulitis posterior*.

"Panophthalmitis is both order and genus."

It is not our design, as it would lead us too much into detail, to examine this beautiful classification, but we propose to take a rapid glance over these different varieties of ophthalmiæ; and simply note any new or important fact that may arrest our attention.

In certain cases of conjunctivitis, phlyctenulæ like pin's heads are

observed on the palbebral conjunctiva, and on the conjunctiva of the sinuses. These are the result of small collections of exuded matter under the epithelium. We think this condition is particularly observed about the *caruncula lachrymalis*.

To the membrane lining the internal surface of the cornea, the name of Descemet is given, and Mr. Jones states he has known partial opacity of the cornea to be produced by the cataract needle passing through the iris and touching it posteriorly.

Of iritis, he says:

"In consequence of the coloration of the iris, it does not, like the conjunctiva, for example, when inflamed, appear red, but of a colour which is a compound of its own natural colour, and that of the stagnant blood. Thus a blue iris becomes green, a brown iris reddish brown. The brilliancy of the iris is at the same time impaired or lost. Subsequent changes in the colour of the iris are owing to exuded matter and to changes in the pigment."

Is the lens ever regenerated? To which he replies—

"Pauli, Lowenhardt and Textor have repeated the experiments on regeneration of the lens in animals with success. Textor communicates some new cases of regeneration of the lens in man after operations for cataract. The proof that the newly formed substance possesses the same intimate structure as the lens has at last been supplied by Valentin's microscopical investigation of the subject."

He thus classifies the causes of ophthalmic inflammation.

"The practical advantage of being acquainted with the causes of ophthalmic inflammation is to know how to avoid them, and thus to prevent the inflammation, or, if they have already produced inflammation, to know how to remove them if still in operation and removable.

"The causes of ophthalmic inflammation may be referred to three heads,—viz: 1st. Those which operate directly on the eyes. 2nd. Diseases of other parts with which the eyes sympathize, or which spread to the eyes. 3rd. States of constitution and constitutional diseases which, though they do not necessarily determine inflammation of the eyes, at least predispose them to be affected by other causes.

"To the first head belong:—Direct injuries—direct influence of cold—the direct action of very strong light, or of this and strong heat together—the irritation of reflected light—over-exertion of the sight, especially in bad light, either too weak or too strong, with much stooping of the head—the direct influence of acrid vapours,—epidemic or endemic influences—the direct application of contagious matters. These are all exciting causes; but some of them require to be assisted by other causes, so that they operate partly as predisposing causes also.



“To the second head belong diseases of the skin, especially the exanthematous diseases.

“To the third head belong the scrofulous, rheumatic or gouty diathesis, and constitutional syphilis.

“Under the influence of these causes, different forms of ophthalmic inflammation are produced.”

The peculiarities to be observed in the treatment of ophthalmic inflammation, he sums up as follows :

“In consequence of the peculiarity of the structure and functions of the eye, its usefulness is apt to be interfered with by such effects of inflammation as in most other organs would be of little or no moment. Hence, though the treatment of ophthalmic inflammation must be conducted on the same general principles as that of inflammation of any other part of the body, it is necessary, *cæteris paribus*, to push it with more activity, and at the same time to attend to numerous special details. Thus in iritis, blood-letting and mercurialization require to be pushed to a greater extent than might in another organ be thought advisable for the same kind and degree of inflammation. But supposing blood-letting and mercurialization thus pushed have been successful in subduing the inflammation, the neglect of such details as the application of belladonna to keep the pupil dilated, may have allowed it to become closed, or the lens spotted over with depositions of lymph, in which case vision will be lost or greatly impaired.

“In the treatment of ophthalmic inflammation, the first points to be attended to (besides, as a matter of course, the removal of the exciting cause, if still in operation and removable), are the protection of the eyes from every thing which can cause or keep up irritation—such as using them or exposing them to strong light—and the avoidance of whatever is calculated to operate injuriously on the system in general, such as exposure to the weather, corporeal exertion, errors of diet, &c.

“When ophthalmic inflammation is sympathetically connected with disease of some other organ, as the exanthematous ophthalmiæ are with the inflammation of the skin, or symptomatically connected with some general diathesis, as scrofula, or disease, as syphilis, the treatment of the ophthalmic inflammation ought not to be delayed until the removal of the disease with which it is sympathetic, or of which it is symptomatic.

“It is true that the local disease cannot always be cured or alleviated until the removal of the general disease, and that the removal of the general disease will, of itself, often determine the subsidence of the local. This, however, ought not to prevent us from at least attempting to relieve the eyes as quickly as possible.

“For the cure of ophthalmic inflammation, as for that of inflammation generally, different plans of treatment are required according to the structure or structures affected, the degree and stage of the inflammation, &c.”

To general and local bleeding; mercurialization, especially in acute iritis, emetics, purgatives, diaphoretics, and nitre are added to subdue and prevent the bad effects of inflammation upon the eye. But belladonna is the remedy and medicine most peculiarly appropriate to the eye. It not only dilates the pupil, but subdues intolerance to light, and thus obviates inflammation.

But we must hasten on to complete our notice of this work. We find about sixty pages of this manual devoted to the interesting subject of cataract. With a few extracts and remarks on this topic, we propose to close this review.

After the usual definition of cataract; its varieties into lenticular, capsular, and capsulo-lenticular; into hard, soft, and fluid; its size and color; we find the following questions thus answered:

*“When one eye only is affected with cataract, and the vision of the other good, should an operation be performed?”*—Under such circumstances, the practitioner will not recommend recourse to an operation, and indeed the patient is not likely to desire it, except, as is sometimes the case with young persons, generally females, when the cataract is white and very evident, for the sake of getting rid of the deformity.

*“When in one eye useful vision is lost, and in the other, vision has become misty from cataract, should an operation be performed on the former?”*—The usual advice is to wait until useful vision is lost in the latter also; but it is better to operate at once on the blind eye, though the determination of the point may be left to the convenience of the patient.

*“When in an elderly person double lenticular cataract has become so far developed as to interfere with useful vision, when should an operation be had recourse to?”*—If extraction is to be performed, operate as soon as possible, for there is more chance of the vitreous body being sound than at a later period; if, on the contrary, displacement is to be performed, the operation may be deferred until the cataracts be more developed.

*“When cataract is fully formed in both eyes, may both be operated on at the same time?”*—As a general rule, the answer is in the negative, if extraction is to be performed; in the affirmative, if displacement or division.

*“In cases of congenital cataract, at what age should the operation be performed?”*—It ought to be performed in infancy, and, if possible, before teething commences; if not, soon after teething is completed.”

He relies upon the catoptric examination in the diagnosis of cataract, and we should have been pleased had the full credit of its introduction into practice been given to its discoverer, the late Mr. Sanson, of Paris. And this would have been done, had but the

moiety of the zeal for the honor and merits he evinces for his own countrymen been bestowed upon others.

This examination is thus described :

*“Catoptrical examination of the crystalline body.*—The pupil being dilated by belladonna, and the patient sitting with his back to the window, if a lighted taper be held before the pupil, three images of it are seen situated one behind the other, if the cornea and crystalline are of their natural transparency. Of these images, the anterior and posterior are erect, the middle one inverted. The anterior is the brightest and most distinct, the posterior the least so. The middle one is the smallest, but it is bright. If the taper be moved, the two erect images follow its motions in the same direction, but the inverted image moves in the opposite direction, though not so quickly, nor through so great a range as the other two. The anterior erect image is produced by the cornea, the posterior by the anterior surface of the lens, and the middle or inverted image is produced by the concave surface of the posterior wall of the capsule.

“The posterior erect and inverted images are not produced, if the anterior part of the crystalline body be opaque, whether the rest be opaque or not, but if it is the centre of the posterior part only which is opaque, the posterior erect image is produced, but not the inverted one. When the opacity is as yet slight, the images may be produced, but will be more or less indistinct. Of course the anterior erect or corneal image is not affected, unless the cornea is diseased.”

We observe nothing new concerning the preparation of the patient for the operation, the position of the surgeon and assistants, &c. ; but in a note on page 267, the needle for couching or reclination is recommended to be introduced through the sclerotica neither above nor below the transverse diameter of the eye, because the long ciliary artery of the temporal side divides at an acute angle into two branches, about a quarter of an inch from the iris : to avoid wounding it or these branches, therefore, the *transverse diameter* is the point selected. The curved needle too, is to be first introduced with its convexity up, its concavity down, and to enter the point well, let the handle be lowered and then gradually be brought horizontally and rotated one quarter upon its own axis, to change the convexity forwards and the concavity backwards. This we conceive to be an important improvement over the old method of puncturing with the couching needle. The chief difficulty of this operation has been in the introduction of the instrument. For the first years of our practice, in some 40 or 50 cases of cataract operated upon, generally by couching, the success was not satisfactory ; but during the last twelve months, the result has been better. Of the last 9 cases occurring within two



months, we expect to succeed in 7. We attribute the change in the result to the facility of puncturation and introduction of the needle ; to using it in the eye as little and as quickly as possible ; and then to the immediate and energetic means of subduing the consequent inflammation to the operation.

Of the comparative advantages and disadvantages of extraction, displacement and division, Mr. J. remarks—

“By the operation of extraction, the cataract is removed wholly and at once from the eye, and very good vision restored ; but the operation is a nice, if not a very difficult one, and liable to the occurrence of the various untoward circumstances above mentioned, by which its success is readily marred.

“The operation of displacement, which may be performed in the same cases as extraction, is neither so nice nor so difficult an operation, does not expose the eye to the same risk of immediate destruction, and though the cataract is apt to return to its former place, the operation may be repeated ; but though displacement may have succeeded as an operation, and vision be restored, the eye is not so safe as after successful extraction, but, as above mentioned, is liable to become affected with internal inflammation, which ends in amaurosis.

“Extraction thus possesses a decided advantage over displacement, and is therefore generally preferred, except when the unfavourable complications above mentioned exist.

“The degree of softening of the vitreous body requisite to admit of safe displacement of the lens is not so great as to forbid extraction, but of course, if, in the cases in which the vitreous body is so much dissolved, that the displaced lens is apt to float up again, displacement be contra-indicated, extraction is much more so.

“All other things being equal, it might perhaps be laid down as a general proposition, that in the very cases in which displacement admits of being most readily and safely performed, extraction is less safe, whilst, on the other hand, in the cases in which, in consequence of the soundness of the vitreous body, extraction is most safely and easily performed, displacement is least so.

“As the cases for which division is best fitted are different from those in which extraction or displacement is indicated, there is no comparison to be made between them. It is, however, to be observed, that a combination of division and extraction is sometimes had recourse to in cases of common lenticular cataract of old people. The object of having recourse to this compound operation is, as above mentioned, that the lens may, by solution and absorption of its soft exterior part, be reduced to its hard nucleus, which, in consequence of its small size, will admit of being extracted through a small section of the cornea.”

On the subject of Pterygium we have nothing new, and as the success of the common modes of treatment are not very satisfactory, this is much to be regretted.

At the end of the volume, a glossary of ophthalmic terms occupying nearly six pages will be found.

This imperfect notice, prepared under many interruptions, we here close, and commend this manual as a book of reference containing much new and highly useful matter on the diseases and operations of the eye.

---

BIBLIOGRAPHICAL.

1. *Handbook of Human Anatomy, general, special and topographical.* Translated from the original German of Dr. ALFRED VON BEHR, and adapted to the use of the English student, by JOHN BIRKETT, Fellow of the R. C. of S., and Demonstrator of Anatomy at Guy's Hospital. pp. 487. Philadelphia: Lindsay and Blackiston. 1847.

As there never has been but one superintendent of this Journal since its revival, and having failed, after many appeals, to secure the co-operation of even those *pledged* to its support, it cannot be expected that more than one review for each No. can be prepared, or even that much, by one who has had and still has the almost entire labor of this monthly publication on his hands—more especially as he is at times overwhelmed with professional business. But though thus treated, he is still determined to do his utmost to extend the usefulness and value of the Journal. If even *ten, yea five faithful* contributors be found in this whole region of country, the Southern Medical and Surgical Journal can be sustained.

For the work, the title page of which is given above, we are indebted to its publishers for a copy. It is a very neat volume of large duodecimo size,\*and its typographical execution is good. From the translator's preface we learn that this, like the one we have already reviewed for this No. of our Journal, is a manual, forming a series now in the course of publication at Erlangen, by Drs. Von Behr and Minding, entitled the "Pocket Encyclopædia of the Medical Sciences." From a hasty examination, we are prepared to recommend this little volume, as a *handbook* of Anatomy.

2. *The Pathological Anatomy of the Human Body.* By JULIUS VOGEL, M. D., Professor of Clinical Medicine at the University of Giessen. Translated from the German, with additions, by GEORGE E. DAY, M. A. and L. M., Cantab. Member of the Royal College

of Physicians, &c., &c., &c. Illustrated by upwards of One Hundred plain and colored Engravings. pp. 534. Philadelphia: Lea and Blanchard. 1847.

This is a large octavo volume, constituting a complete treatise on general morbid anatomy, and issued in Messrs. Lea and Blanchard's best style. Its contents are distributed under ten Chapters, embracing abnormal development of gaseous matters—pneumatoses; abnormal collections of aqueous fluids—dropsies; pathological relations of the blood; general and special relations of pathological epigeneses; pathological changes of the tissues and organs of the body; combination of morbid changes; independent organisms in the human body; malformations; and post-mortem changes. Altogether we consider this work a most valuable acquisition to our library, elucidating as it does morbid anatomy by chemistry and the microscope.

3. *A Treatise on the Diseases of the Eye.* By W. LAWRENCE, F. R. S., Surgeon Extraordinary to the Queen, &c., &c., &c.: new edition. Edited, with numerous additions, and One Hundred and Seventy-six Illustrations, by ISAAC HAYS, M. D., Surgeon to Wills' Hospital, &c. pp. 859. Philadelphia: Lea and Blanchard. 1847.

This is a new American edition from the second London. In 1833, Mr. Lawrence first published a volume, consisting of Lectures on the Anatomy, Physiology and Diseases of the Eye, which he had delivered at the London Ophthalmic Infirmary. In 1840, he issued a second edition, in which the first was carefully revised and much valuable matter added. Dr. Hays has contributed to the merits of this large volume, which is without doubt our best treatise on diseases of the eyes.

4. *A System of Human Anatomy, general and special.* By ERASMUS WILSON, M. D., Lecturer on Anatomy, London.—Third American from the third London edition. Edited by PAUL B. GODDARD, A. M., M. D., Professor of Anatomy, &c., in the Franklin Medical College of Philadelphia, with Two Hundred and Thirty-three Illustrations, by GILBERT. pp. 610. Philadelphia: Lea and Blanchard. 1847.

We have alluded to this work as one of a series of manuals now in the course of publication by Messrs. Lea and Blanchard, whose liberality we have had occasion so often to acknowledge under our head of Bibliographical notices. It has already passed through several editions, both in this country and in Europe, where its author



---

ranks with the highest on anatomy. This last edition is issued in a beautiful octavo form, filled with illustrations, and making a very handsome volume. Of the merits of Wilson's Anatomy, we need only state the facts, that 5000 copies were sold in London within five years of its publication; that in the same period a third edition of it is called for in this country; and that it has been translated into the German language.

5. *Philosophy of Animated Existence; or Sketches of Living Physics: with discussions of Physiology Philosophical—To which is added a brief Medical account of the Middle Regions of Georgia.* By JOHN B. GORMAN, M. D. pp. 570. Philadelphia: Sown and Ball. 1845.

The author of this volume has had the kindness to present us with a copy. With every disposition to do him full justice, and, as Georgians, feeling a deep interest to proclaim the merits of our own immediate professional brethren, still we shrink from the task of reviewing this book. We can but express the wish that Dr. Gorman's style were different, and that his talent and labor, worthy of all praise, had been employed in preparing a more useful, practical and profitable work.

---

*On the Diagnosis of Nervous Diseases.* By ALEXANDER H. STEVENS, M. D.—Read before the New York State Medical Society Feb. 3, 1847.—(New York Journal of Medicine.)

The usual nosological classification of diseases, is not that which the practitioner is first led to ascertain, when he seeks to discover the nature of an obscure case presented to him for diagnosis. He rather wishes to determine if the malady be nervous, inflammatory or organic, and if so, if it be malignant. If he can advance no further, he yet will have done much, after all, that is necessary, therapeutically, in having advanced so far as to have settled to which of these classes of disease his case belongs.

It is my purpose to offer a few practical remarks, designed to aid in the diagnosis of nervous diseases. The first view of a patient suffering under a nervous disease, is not unfrequently sufficient to lead to a strong presumption as to the nature of his case. He has to narrate his sufferings and his symptoms, and often to use his eloquence to impress upon you that he is indeed a very sick person. His aspect is not that of emaciation, there is not the haggard look that comes of sleepless nights, or the wan countenance of an internal suppuration, or the leaden look of internal disorder. With faith in physic un-

bounded, he yet seems to reproach his former attendants for their want of skill in bringing its resources to bear upon his case. Nervous diseases present the far larger portion of strange, out-of-the-way symptoms, not to be embraced within the nosological definitions of other maladies.

Accustomed as I have been to be extensively consulted in nervous diseases, I early began to ask myself, when a case presented itself, did I ever see such a case in the hospital, or among dispensary patients, or among the poor in any of the walks of life. If not, I soon began to discover that generally it was a case of nervous disease I had to deal with.

An emaciated young man presented himself to me some years since, and in answer to my question, "What is the matter with you?" replied, "I have a stricture of the *œsophagus*." "And pray, my good friend, how did you find that out?" "Because I can't swallow." "And where did you learn that you had an *œsophagus* to swallow with?" Rather irritated, he replied, "I did not come all the way from Vermont to learn that here in New York, you may be sure; but our doctors have tried me with the probang, and I want you to do so too." "Well, tell me first, how this difficulty began?" "Why, sir, it began all at once; I could not swallow any solid food, and I cannot now." "Will you try for me?" After a very long struggle, I got him to take some roasted mutton from my table, and he went his way rejoicing. It was not a case of feigned disease, for the argument that ultimately prevailed with him, and broke his firm resolve not to endeavor to swallow, was an explanation of the real symptoms of stricture of the *œsophagus*—not an inability to swallow, but an arrest of the swallowed food in the course of the *œsophagus*.

An only child, a girl about twelve years of age, met with a fall, and bruised the lower right side of the abdomen. The family physician made the usual applications, and treated the case as rather a serious one. Without being apparently very sick at the end of ten weeks, she yet did not appear to be improving, but maintained her position all day with the feet on the sofa, being carefully carried to bed at night. At this time I was consulted, and being unable to detect any local injury, did nothing. At the end of six weeks the family physician retired, and desired me to take the case exclusively into my hands. Another examination discovered nothing, except that her general aspect was that of good health, the legs and abdomen dropsical. In the utmost consternation, the family demanded my opinion. I asked to defer expressing it, till I had made a second visit. I cannot pretend to describe the scene, when I then said that the patient only wanted the will to get up and play as well as any of her fellows. But this opinion I had not imparted to her, and the grandmother and myself finally compromised matters, by proposing to her, to have a dance as soon as she was able to write the notes of invitation, ten days from the date of the second visit. The prescription was entirely successful, and she danced at her own ball as merrily as any of her guests.

There is a *fashion* in nervous diseases. Some years since, spinal irritation was much in vogue. Nervous persons are apt to adopt as their own, the latest forms of fashionable maladies. I have seen an incredible number of such cases, some of them bed-ridden for months and years.

Stricture of the rectum has had its day. I have seen three cases in one family, which had been treated for months, and finally got well by the failure of the head of the family in his business; thus leaving the female members no time to think of their imaginary diseases. Nervous disorders appear to be adopted either in revenge of some misfortune, or in despair from some blighted hope. They require, more than any thing else, moral treatment. The physician should endeavour to penetrate into the innermost recesses of his patient's heart, that he may fulfil the great indication, which is, *to present a powerful motive for recovery*; and he should never suffer his patient to doubt for one moment that such a recovery will take place.

During the prevalence of spinal irritation, I was asked to see a lady recently from England by way of Jamaica, whither she had been sent for a supposed consumption, with spinal irritation at the same time. She had been confined to the bed, with few exceptions, for more than two years. Perceiving, after a few visits, that lively conversation made her forget her ailments, and that the general assemblage of symptoms did not belong to any nosological disease, I obtained from her married sister some matters of her private history, that led me to be quite sure that her case was purely nervous. "My dear Doctor, do you know any thing that would cure my poor sister?" "Yes, I do, I am sure of it." "What! pray tell us what." "That cat-o'-nine-tails hanging over your fire-place." I will not detain you by describing the scene that followed. About six weeks afterwards I was stopped in Broadway by two highly dressed ladies, one of whom tapped me on the shoulder, and introduced my patient to me, saying with a smile, in which the patient joined, "that last prescription cured my sister."

Of *local* nervous or neuralgic affections, these, when not organic, are seated, either, 1st, in the part where the symptoms are perceived; or, 2d, at the origin of the nerves of that part; or, 3d, in the nerves of some part going to the same portion of a nervous centre for their origin. Thus, a malady of the brain will cause a pricking, or numbness in the fingers of one side. And, as an illustration of the third class of cases, nervous pain is felt in the spine from disease of the viscera corresponding to the part, the nerves of each having a proximate origin, through the great sympathetic and the spinal marrow. So too, affections of one eye are felt and sometimes extended to the other. External injuries, and the internal injuries suffered by the organs of digestion by errors in diet, are among the more common exciting causes of local nervous affections. The joints are especially liable to these disorders. They are not unfrequently the sequelæ of sprains and of slight inflammatory affections of the joints, from



other causes. As a general fact it may, I think, be stated, that they are the result of *bad treatment, hyper-medication*.

In regard to sprains, I have seen much deformity arising in the ankle-joint from a fracture of the fibula, and in the wrist still oftener from a fracture of the radius, treated as sprains. This is among the poor. But in sprains, strictly so called, it is exceedingly rare to find very long continued injuries from these accidents, except among those who can afford to nurse them.

A lady twisted her ankle severely in coming down stairs. Cold applications and rest were the prescriptions for four weeks. Her health in the meanwhile had suffered from want of exercise. The part was preternaturally cold, painful on pressure, and but very little swollen. A consultation was called, and a blister to the instep followed. When this got well, gentle exercise was recommended. This gave pain, and rest was again resorted to, and friends now came in with a thousand and one applications, a goodly number of which were tried. At the expiration of two years, her health being apparently as bad as ever, her husband, a naval officer, was lost at sea; she retired to the country, devoted herself to the education of her children, had no time to think of her lameness, and got well.

A young lady, engaged to be married, had an affection of the knee-joint, following a bruise of the part. It was kept quiet, rubbed and blistered for many months, and every suggestion was followed with all the solicitude which a strong desire of recovery could inspire. Instead of improving, the joint became rather more tender and painful, after exercise; it was swollen and cold. She now came under the care of a practitioner, who rubbed and fomented it, and directed steady exercise, and saw that such exercise was effectually taken. In three weeks she got well and was married.

I visited, some twelve years since, a lady with an active inflammation of the knee-joint, and treated it successfully by rest, cupping, and blistering. Some slight injury in walking about three years since, occurred, and the same treatment was repeated, although there were very slight inflammatory symptoms. Somehow or other, the period of rest was protracted until the joint became very stiff. In this posture of affairs, I was again consulted. I directed the limb to be left to fix itself by its own weight, and used passive motion and frictions, and this, although the pain was great at times, even when the part was at rest. For I argued, that if there was any inflammatory or organic disease of the joint, going on, she would show it in her countenance, which she did not. She, too, stopped me in the street the other day, saying, "Doctor, you promised me I should dance as well as Fanny Elssler; I can't do that, but I can walk as well as any one." I am quite convinced that joint not only got stiff, but also neuralgic for want of use.

Of the frequency of neuralgic affections of the joints, the highest authority now living in a matter of this kind, (Sir Benjamin Brodie,) declares that no less than four-fifths of all the cases of diseased joints

---

occurring among the higher classes of society are neuralgic. Of diseases of the breast, more than half that have fallen under my observation have been of the same character.

---

*Practical Remarks on Congestive Fever.* By E. F. BOUCHELLE, M. D., of Columbus, Miss.—(Western Lancet.)

In perusing the last edition of Stokes and Bell's Practice of Physic, a work embodying many valuable principles of medicine, with great experience and learning, I am forcibly impressed with the views of Dr. Bell, as almost coincident with my own, as it regards the efficacy of opium in the treatment of congestive fever. I have long been satisfied in my own mind, that the usual mode of treating congestive fever, the plan pursued by most of the physicians of the South West, is not only improper but dangerous, as its direct tendency is to strengthen the disease and hasten the stage of collapse. The views which I now entertain on the subject of congestive fever have been promulgated throughout the sphere of my acquaintance, since the summer of 1837.

It is perhaps unnecessary to advance, in detail, a theory of the disease in question; suffice, for all practical purposes, to remark, that all the leading phenomena of the disease are referable to derangement of the organic system of nerves, more particularly; the excitement of congestive fever is irritable excitement, and in most cases so excessive, that it soon sinks the system into collapse, unless moderated.

Such being a *syllabus* of my pathology, it necessarily follows that in its treatment I invariably call in requisition those remedies whose known tendency is to allay nervous irritation, tranquilize the system, and produce sleep. Such remedies are to be found under the class of *narcotics*, and in another *great remedy* belonging to no particular class, which the hand of a merciful and all-wise Providence has disseminated throughout the universe; a remedy equally accessible to the rich man and the poor man, as it abounds in all places, and can be procured "without money and without price." I allude to *cold water*. The most powerful combination, however, to prevent the recurrence of a paroxysm of congestive fever, when the disease observes a remittent or intermittent character, is morphine and quinine. In the whole course of my observation I have never known the congestive fever to observe any other than the intermittent or remittent type; unless the constitution is so frail, or the disease so violent as to destroy the patient in the first paroxysm, which it often does; moreover it is a rare circumstance if an individual, with the most robust constitution, survives a second or third paroxysm. Most usually, during the paroxysm, I prescribe *laudanum* and cold water, which rarely fail to conduct the patient safely through; and during the interval, morphine and quinine, to prevent a recurrence. The

following is the prescription usually observed:—R. Sulph. quinine, grs. xxiv.; Sulph. morphine, grs. ij.; M. f. 12 pills,—to take one sufficiently often to keep up a slight state of stupor or narcotism; that is, every hour or two, *pro re nata*.

I, for one, am unfriendly to large doses of quinine, and am certain that two or three grain doses repeated at proper intervals, will insure all the good effects of that potent salt, without incurring the risk of loosing them; not only loosing, but inflicting an injury to the nervous system. Our firm belief is, and that opinion is founded on experience, that, as an antiperiodic, two grain doses of quinine are as efficacious as large doses; and that in the same proportion that we augment the dose, in the same or a greater degree do we diminish the specific action of the article; also, that its combination with a narcotic enhances its antiperiodic powers in an eminent degree.

There is a secret in connection with quinine, which, probably, very few physicians have observed; that is, that its administration during the stage of excitement in fever is often hurtful, and, at best, uncertain; in order to ensure a favorable influence in such cases, we have only to combine it with an anodyne. It is rare that quinine will exert any other than a favorable influence during the hot stage of fever, provided morphine be blended with it. Its most common effect under such circumstances, is to lessen the force and frequency of the pulse, relax the skin, and produce sleep. The above combination is an admirable prescription in summer fevers attended with great gastric irritability,—it must be given in the form of pills. Another valuable combination, where the excitement is inordinate, is quinine, tartar emetic, and morphine—provided there is no great nausea. The above remarks refer only to summer and autumnal fevers, of open excitement.

Before leaving this subject, I will remark that 20, 60, and 100 grain doses of quinine are very common these days. However, such doses are not prescribed, or if so, by *very few* of the scientific physicians of Mississippi and Alabama. In the meanwhile I will not presume to deny that peculiar modifications of disease, may render *such doses* applicable in more southern latitudes; generally speaking, these huge doses are given by that numerous class of mountebanks and imposters who infest our country; men who recognise no essential difference between the stomach of a human being than that of an ostrich; between the constitution of a man and that of a horse! Would to God that the prescribing of large doses of quinine was the only species of quackery practised in the West! Calomel, and other remedies, are given in equally as large quantities; the success of which *energetic empiricism*, our numerous grave-yards bear melancholy though silent testimony, to say nothing of the thousands of constitutions literally destroyed by as *many anomalous diseases*!

There is a maximum and a minimum dose for any article of the materia medica—a fact which should never be forgotten in clinical practice—and when we transcend either degree, we either produce no effect at all, or we do mischief.



There is no class of remedies, however, whose dose is more variable than that of narcotics. Indeed, we can sometimes give them *ad libitum*, with very little effect; as we all know that under certain states of the nervous system arising from excessive pain, the system can scarcely be composed by opiates. Who has not seen this verified in prescribing for acute gout, the passage of biliary calculi, spasmodic cholera, tetanus, &c., &c. One of these peculiar conditions of the system occurs in congestive fever,—as we are certain that during one of its paroxysms nothing short of mammoth doses will conduct the patient safely through, and prevent collapse; which extraordinary resistance to the usual influence of opiates only argues the propriety and necessity of such remedies. I do hope, for the sake of human life, and the honor of medicine, that the day will ere long arrive when physicians will be convinced, that calomel, and purgatives generally, French brandy and other stimulants, mustard cataplasms, blistering plasters, &c., are not the remedies for congestive fever, the endemic of the Mississippi valley, whose very name in many places, is associated with all the horrors of the grave, in consequence of its great fatality. All purgatives, all stimulants, internal or external; all irritants—are injurious in congestive fever. So long as I pursued the plan of *correcting the secretions, and stimulating by brandy, camphor, camphor and quinine, ammonia, pepper, &c., &c.*, I lost patients. But when, on the other hand, after much reflection, I had changed my pathology of the disease, and adopted the *cold water* and *anodyne* practice, my labors were crowned with success, and have been ever since. In truth, the most violent forms of congestive fever will as certainly yield to the anodyne treatment, as will a local inflammation yield under depletion. I do not regard quinine as a stimulant, it has tonic properties, and in combination with an anodyne, is the most powerful sedative in general use. (There are many sedatives very active, which are not used in the common routine of clinical practice.)

We have said nothing definite as yet about cold water in congestive fever, but will do so in very few words. How is the cold water used in congestive fever? Internally and externally; a pleasant remedy, and one which any patient will grasp eagerly, and without much persuasion. I use the cold douche in collapse to arouse the system to reaction, which it will more often do than any other means that I have ever seen essayed. I have seen many patients, as it were, moribund; cold and clammy skin, thready pulse, sunken features, blue finger nails and lips, great epigastric oppression, and breathlessness, rescued, as it were, from the grave, by the *magic influence* of the cold douche. The cold water is not less useful during the paroxysm, to allay general anxiety, distressing vomiting, thirst, and internal heat. I allow the patient to drink it freely,—it gives great relief; it removes, in connection with laudanum, irritation of the ganglionic nerves, upon which the miserable epigastric oppression and gastric irritability depend, and—*Alumina*—I conclude the patient

safely through the paroxysm. How much more rational such treatment is, and, at the same time, how much more grateful to the languishing sick man, that the opposite plan of tormenting him *unto death* with heating stimulants and *blistering plasters*! How much more rational, than the opposite *vile* system of cramming his stomach with horse doses of calomel “to remove congestion” of the *darkest and foulest* of all places, “*the venous cavity!*!” Would to God that Mississippi and Alabama could be relieved of the curse of R. A. C. quackery! Oh! ye shades of departed worth! ye ghosts of Hippocrates, Æsculapius, and Galen, how long will ye endure such humbuggery! Oh! “*venous cavity!*” Oh! calomel, and R. A. C. pills! inexorable monsters, who have slain your hundreds, why seek to demolish thousands! I am not jesting; no, I am serious.\*

But, for the purpose of illustrating the most rational practice in congestive fever, I will submit one of the most violent cases I ever saw in Mississippi.

*Case.*—A particular friend, of vigorous constitution, was seized about midnight, on the 20th of September, 1845, with a slight chill, which was succeeded by vomiting and profuse liquid evacuations from the bowels. I saw the patient about 9 o'clock on the 21st; his head was hanging over the side of the bed, and he incessantly vomiting or heaving; his features were sunken and pale; breathing rapid and difficult from congestion of the lungs; pulse feeble and very rapid, almost imperceptible at the extremities; lips blue, and tongue pale and moist; with a clammy exudation of viscid perspiration all over the surface. Indeed, I was surprised to find my friend on the very verge of the grave: that he was sinking rapidly into a deadly collapse. He complained of great thirst and universal heat; he would cry out, “my God, I must have fresh air, or I'll die, I am burning up!” when the pulse was gone at the extremities, and the skin cold. The friends around implored me to stimulate him, and apply sinapisms to the extremities: I refused, and immediately went to work in my own way. I gave him 100 drops of laudanum forthwith, and in a half hour gave 50 drops more, which he drank; seeing that the irritability of the system was so excessive, that the laudanum would not take effect unless repeated at short intervals,—in a half hour more, I gave him 100 drops by enema. In an hour the vomiting stopped. My friend drinking cold water by the pitcher-full. He very soon became tranquil, and fell into a deep sleep, with his mouth and eyes half closed,—the spectators around thought that he was dying; but I knew better, when I took hold of his hand and found that it was getting warm, and that the pulse was rising at the wrist. In the course of two hours more, my patient was under a full reaction; his skin warm and pulse full, beating eighty in the minute. He did not wake until sundown—when he *got up*, dressed himself, and *went about his usual business!!*

\* I don't allude to Prof. Cooke; but to those who endeavor to treat the fevers of Mississippi, Alabama, &c., according to his theory. I respect the Professor; at the same time I am convinced of his delusion.

The next morning (22d,) I entreated him to take to his bed, and commence with the quinine and morphine, to prevent a recurrence of the paroxysm, which would take place about midnight—he declined, stating that he was well. However, the poor fellow was seized again at 1 o'clock on the 23d.

In two hours he was vomiting forcibly, with frequent liquid dejections from the bowels; great dyspnœa, and small and rapid pulse, with cold skin. At daylight I saw him, and gave the first dose, which was 100 drops of laudanum. Seeing that he became worse, complaining of indescribable epigastric heat and oppression, I repeated the dose, which had no effect, and he soon became wild and unmanageable. I ordered 100 drops more by enema, in starch; at the same time allowing him to drink freely of cold water acidulated with citric acid, which he drank in his derangement with all the avidity of a famishing animal. He soon became cold from head to foot; *no pulse*, skin cold and bathed in a viscid sweat, lips blue, eyes sunken, and features shrivelled; breathing slow and oppressed from congestion of the lungs. Indeed, the dyspnœa was so great, that he looked very much like a man suffocating. I ordered 100 drops more in enema, and applied two small sinapisms to the neck, one over each pneumogastric nerve, recollecting to have read of such things being useful in asphyxia, &c. In a short time the patient seemed more quiet—drinking freely of cold water occasionally. At this juncture, a medical friend of experience, formerly of the United States Navy, stepped in and pronounced my patient *in articulo mortis*; however, before he had been present one hour, the pulse was rising at the wrist, and the skin began to get warm, and the patient to breathe with more ease.

In two hours more, my patient was lying in a profound sleep, with hot skin, and good pulse; with the warm sweat standing in great drops on his forehead. He awoke late in the evening, very much prostrated indeed. In a short time, I put him under the morphine and quinine, keeping up a slight narcotism until the next period had passed in safety; when I gave a little blue pill occasionally, to restore the secretion. It is proper to mention here, that the use of laudanum and quinine, as above recommended, almost always leaves the system in a torpid condition, as manifested by a coated and dry tongue; so that convalescence will be tedious without the occasional use of a little blue pill, &c.

The patient whose case I have given, cannot bear the smallest quantity of laudanum when well. I could, if necessary, adduce other cases, showing conclusively that laudanum, cold water, and quinine, are the remedies for congestive fever. It is probable that the above patient would have died, had it not been for the plaster (size of a dollar) to the neck; or it may be that the laudanum had not taken effect until then.

The treatment which has just been detailed in a detached and hurried manner, with some little modification, is applicable to any



form of summer and autumnal fever in Mississippi. There is no prescription better, in common fevers, to prepare the system for quinine, than morphine and tart. emet. in solution. Ordinary febrile excitement can resist its influence but a few hours. In conclusion: There is no class of remedies which exerts so favorable an influence in all of the fevers of this latitude as the class of narcotics.

---

*Observations on Spinal Irritation.* By CHARLES FAVELL, M. D., Physician to the Sheffield General Infirmary.—(Provincial Med. and Surg. Journ., and Ranking's Abstract.)

[The subject of spinal irritation is also ably considered in a clinical lecture by a physician whose early and lamented death has recently been recorded. His observations are to the following effect :]

Spinal irritation is characterized by morbid sensibility of certain nerves proceeding from the spinal cord, and by a preternatural susceptibility of the cord or its coverings to external impressions. You will observe that both these features of the affection were very well marked in the cases which have been already detailed: in one case the morbid sensibility of the nerves was evidenced by painful cramps in the lower extremities, and in the other by constant and severe pain in the side; whilst pressure over the same portion of the spinal column occasioned pain and uneasiness in both.

It is further worthy of remark, that whilst the nervous centre is the seat of the disorder, the pain is situated in some distant part. On what, then, does this abnormal state of things depend? In other words, what is the immediate and efficient cause of spinal irritation? On this subject we find that pathologists entertain very different opinions. Some regard it as consisting in nothing more than mere functional disturbance; whilst others believe it to be the consequence of some organic lesion of the cord or its coverings. For my own part, I believe the affection depends upon a hyperæmatus condition of the blood-vessels at the origin of the spinal nerves, and I am chiefly induced to adopt this opinion from two considerations—the influence of pressure, and the effect of treatment.

Now let us notice these two particulars. 1st. *Pressure.* You are of course aware that when any of the tissues of the body are the seat of acute or chronic inflammation, the pain which results is augmented by pressure. Thus, in cases of peritonitis, the abdomen is intolerant of even very slight pressure; in cases of gastro-enteritis, the effect of the pressure often determines our opinion respecting the nature of the disease; and in pleurisy and pericarditis also, pressure in the intercostal spaces, or even upon the ribs, greatly aggravates the pain; and in like manner, in the cases under consideration, pain and tenderness are experienced by the patients when pressure is exerted upon a portion of the spinal column. But there are two ob-

jections which may be urged against the value of the indication we are at present considering—the influence of pressure in causing an increase of pain. *It may be urged first, that the spinal cord, with its membranes, is too securely protected by the bony canal through which it passes to be liable to be influenced by any moderate amount of pressure which may be employed above it; and, secondly, that in many cases of simple hysteria, the apparent suffering occasioned by pressure on the spine is quite as great as in the cases under consideration.* Let us briefly notice each of these objections.

1st. *The spinal cord and its membranes are removed from the influence of pressure by the bony canal through which it passes.* Now to this objection, a threefold reply may be returned. In the first place, it may be remarked, that if the cord be really so completely removed from the influence of pressure as the objection assumes, then, except the vertebræ themselves be diseased, every portion of the spinal column should be alike sensible or insensible when pressure is exerted along the course of it. But this we know is not so. In two cases which have been recorded, the tenderness, or increased sensibility, was circumscribed. It existed over one particular portion of the spinal column, and when the same amount of pressure was exerted over all the rest, it occasioned no tenderness, no pain, no inconvenience. Hence, we may fairly infer the possibility of affecting the cord or its membranes, in certain morbid conditions of one or the other, by pressure being exerted along the vertebral column.

Secondly, the peculiar anatomical arrangement of the blood-vessels of the spinal cord render it extremely probable that the cord should be influenced by external pressure. “The spinal cord and the nerves which emerge from it,” says Dr. Todd, “are surrounded by a venous anastomosis of remarkable complexity. These veins do not possess valves; they communicate freely with the superficial veins, and with the numerous muscular veins in the region of the back.” Now the very circumstance of this free communication existing between the blood-vessels of the cord and the superficial veins of the back, is not only an *a priori* argument in proof of the possibility of affecting the cord or its membranes by external agency, but it also satisfactorily accounts for the facts for which I am contending. In other words, we see not only why such should be the case, but also the mode in which it operates.

Thirdly, in cases of unequivocal spinal meningitis, pressure or percussion along the course of the vertebræ increases the local pain from which patients suffer. I can vouch for the correctness of this remark from cases which have fallen under my own personal observation.

But I hasten to notice the second objection to which I have adverted.

2d. *In many cases of simple hysteria it is contended the apparent suffering occasioned by pressure on the spine, is quite as great as in the particular class of cases at present engaging our attention.* Now, to this objection I may return again a threefold reply. In the first

place I remark, that in cases of pure hysteria, the pain of which patients complain when pressure is made upon the spinal column is not circumscribed—it is not confined to some particular locality, but, on the contrary, is equally great over every portion of the vertebræ; and moreover, it is not confined to the spinal column, but is of equal severity when the pressure is directed upon the fleshy parts of the back, on each side of the vertebræ.

Secondly, I observe, that whilst in cases of spinal irritation the suffering of the patient evidently increases with the increase of pressure which is employed, this is not the case in hysteria. In this latter affection, the *apparent* suffering of the patient bears no proper proportion to the pressure. Hence we not unfrequently find that in hysterical subjects, the slightest touch with the finger over any part of the back will cause them to cringe and give way, to sob, and gasp, and exclaim, whilst a considerable addition to the pressure scarcely, if at all, increases their distress. But we must further bear in mind that this morbid sensibility in cases of hysteria is not confined to the back, but is manifest in other parts of the body; pressure on the sternum or on the sides will occasion precisely similar indications of uneasiness or pain. We often perceive in these cases, that merely placing the hand, or even the finger, on the sternum or abdomen, without exerting the slightest pressure, the patient shrinks in a moment, as if the suffering which was induced was almost intolerable.

Thirdly, I remark that the immediate seat of the morbid sensibility which exists in hysteria, is obviously the common integument; hence, if a portion be taken up between the finger and thumb, as much distress is occasioned to the patient as if any amount of pressure were exerted upon the spinal column.

Having thus disposed of the two objections which are most frequently urged against the indication which is afforded by pressure on the spine, I proceed to notice, in the next place, the effect of treatment, as corroborative of the view I have taken of the nature of the affection which is the subject of our present observation. And here I may observe, in general, that the method of treatment which affords the most speedy and effectual relief, is precisely that which is best adapted to relieve a state of local hyperæmia. I direct your attention to three remedies in particular—rest, the abstraction of blood, and vesication.

1. *Rest*.—In all cases of local hyperæmia rest is an important means of cure. So long as patients are going about their usual occupations and work, especially so long as they are actively employing the organ which is the immediate seat of disease, the use of remedies is fruitless. The truth of this remark is abundantly confirmed by what we witness every day; and it is also corroborated by what we often see in cases of spinal irritation. In these latter cases the general health is frequently so little disturbed, that persons are unwilling to submit to the degree of confinement which is necessary, and the consequence is, that they do not obtain the relief which they



desire. I need scarcely observe, that in order to secure the greatest amount of rest in all cases where the spinal marrow, its membranes, or the nerves proceeding from it, are the seat of morbid irritability, a patient should be confined as much as possible, to the recumbent posture. But I must further remark that, according to my experience it is not a matter of indifference whether a person lies prone or supine. The former position is decidedly preferable, and hence I generally have my patients placed on a prone couch. The advantages which appear to me to result from this practice are, first, that the common effects of gravitation are obviated: and, secondly, that the necessary remedies are much more conveniently applied.

2. *Abstraction of Blood.*—The relief which is afforded by topical bleeding in cases of spinal irritation is generally very great and often immediate. It was so in the first of the cases which I have detailed. The cramps ceased, and the tenderness on pressure disappeared immediately after the patient had been cupped. The previously constipated state of the bowels of this man (they had not been moved for a week, and only nine times during the preceding nine weeks), may possibly, by some persons, be regarded as sufficient to account for the symptoms under which he was laboring at the time of his admission. But that this was not the cause of his sufferings is obvious from the immediate relief which followed the abstraction of blood, more than twenty-four hours before the purgative medicine had produced any effect upon the bowels. The simultaneous disappearance of the cramps in the extremities, and the pain and tenderness over a limited portion of the spinal column, is further sufficient to connect the two together in the relation of cause and effect. But although the relief which results from bleeding is often so speedily manifest, yet it is not so in all cases. Sometimes the operation has to be repeated several times before any mitigation of the symptoms takes place, and in other instances relapses occur, which render it necessary to have recourse to the same means again and again. In the case of Bilton, we perceive that although he was so perfectly relieved by the cupping, yet some days afterwards he complained of numbness of his legs, which prevented him walking, and there was at the same time a return of the tenderness over the spine. For the relief of these symptoms, which I believe were occasioned by congestion of the vessels of the spinal cord, leeches were applied to the tender portion of the spine, and it was subsequently necessary to apply two blisters. In a case which fell under my observation a short time since, the cupping had to be repeated more than a dozen times, but on each occasion the relief afforded was very marked and considerable.

3. *Vesication.*—The application of blisters in cases of spinal irritation is often productive of great relief: but in these cases, as in cases of inflammation of internal organs, they are not equally serviceable at every period of the diseases. If blisters be applied at too early a period, before the congested blood-vessels have been relieved by the abstraction of blood, they do not, in recent cases at least, afford an

adequate amount of relief, but, on the contrary, they produce a considerable degree of irritation, and occasion a very much greater amount of pain than they do if they are employed later. I have more than once seen persons who were very tolerant of pain, and accustomed to the application of blisters, who, nevertheless, when suffering from spinal irritation, complained of the pain arising from a blister applied at too early a period, as being exceedingly severe, and almost intolerable. It is frequently found to be desirable to employ counter-irritation for a while after the more urgent symptoms have been overcome. Hence, you will recollect, that in the case of Sarah Ann Hooper, after she had been greatly relieved by leeches and blisters, as some uneasiness remained about the side, and slight pain was occasioned by pressure over the upper part of the dorsal portion of the spinal column, she was ordered to have the back rubbed with the croton-oil liniment, which had the effect of producing a plentiful eruption, and ultimately removing the disease.

With respect to medicines in this affection, I shall only observe, that beyond regulating the state of the bowels they are of no use.

---

*On the Management of Convalescence from Acute Diseases.* By M. REVEILLE PARISE.—(*Etudes de l'Homme dans l'Etat de Santé, &c.*, in *Medico-Chirurg. Rev.*, and *Ibid.*)

M. Parise remarks that after serious and prolonged illness every organ suffers more or less from exhaustion, and its function is feebly performed. This condition of the economy results from violent excitement of the antecedent disease and the privation of food. The former, of course, no longer operates, and food may be given to replenish the waste, and recruit the forces, the stomach is therefore the organ with which we have to do.

M. Parise lays it down as a maxim that, after disease, the sensibility of the stomach and intestines is exalted and their tone diminished. The indications, therefore are obviously to diminish the sensibility and to augment the tone of the stomach, and consequently to enable digestion to be properly performed; but our means of accomplishing this are not so efficacious as might be imagined. If the subject be young and vigorous, health is soon restored, and digestion established; but even here, if the tormenting hunger which accompanies convalescence be appeased by injudicious supplies of food, various disturbances of the digestive organs ensue. "But if the convalescent is naturally delicate, nervous, or irritable, if his digestive powers are not strong even in health, if he has reached a certain age, or been worn by anxiety, we must expect a tedious convalescence."

At first sight, the fortifying the stomach by tonics would seem to be a natural means of procedure; but every reflecting practitioner has seen cases in which an irritable and sensitive condition of the stom-

ach renders the establishment of its powers a matter of nicety, as well as difficulty. If we employ a soothing means and a debilitating regimen, the tone of the organ is further diminished; while if we exhibit stimulants, uneasiness and thirst, dryness of the mouth, &c., prove that we are injuriously exciting the organ. Diarrhœa occurring during convalescence often misleads the practitioner, for he has difficulty in determining whether it is caused by some source of irritation still remaining, or whether it is the consequence of simple atony of the intestinal canal. In these cases it may be stated as a general rule, that the diarrhœa of convalescence is connected with defective tonicity, which will be yet further diminished by abstinence and local depletion.

The following indications from the basis of a judicious convalescent regimen:—1. To allow only as much food as the stomach can digest. 2. To advise the patient to eat little and often. 3. To submit the food to effectual mastication. 4. To keep the general surface, and especially the extremities, warm during digestion. 5. To adapt the food to the peculiar sympathies of the stomach. 6. To introduce a judicious variety in the diet. 7. To advise change of air. 8. To avoid vivid moral emotions.

It is certain, notwithstanding, that however properly the above injunctions be carried out, the recovery may be impeded by various accidents. Only two of these are alluded to by M. Parise, and that because of their frequency, viz., *diarrhœa* and *gastro-enteralgia*. When the first of these is present we must endeavor to ascertain whether it is produced by errors of diet or by some moral cause. Is there any inflammation, or does it depend on simple atony of fibre? Even when symptoms believed to be inflammatory are present, we must still be very cautious in recommending abstinence and leeching, which may produce a degree of exhaustion and loss of contractility of parts, which may take years for its reparation. Diminution of food will, however, be required, as well as counter-irritation, in the form of dry cupping, or sinapisms to the abdomen. When the irritation has subsided, mild tonics and an improved diet are indicated. In passive diarrhœa, M. Parise speaks of the *theriacum* (a miscellaneous compound containing opium) combined with calumba.

*Gastralgia*, or *enteralgia*, is far more frequent after severe disease, especially when the alimentary canal has been affected, than is generally believed. The irregularity forms one of its most distinguishing features. The acute feeling of hunger suddenly changes into a state of insupportable languor. In this state a superabundant nourishment is injurious, but in a far less degree than a too scanty one. Abstinence cannot be borne, nor do the epigastric pain and sinking cease until a certain quantity of food has been swallowed; while, if its administration be too long delayed, digestion does not take place, and diarrhœa is apt to ensue. First among medicines adapted to this state is bismuth alone, or with opium and calumba. Blisters, sinapisms to the epigastrium are also beneficial, as is also the endermic use of morphia.



Whatever means we have recourse to for the restoration of the energy of the alimentary canal, their prolonged employment is necessary. "Perseverance and variety," says M. Parise, "must never be lost sight of in a troublesome convalescence, during which health and disease are constantly vibrating."

---

*On the Abuse of Alkaline Remedies.* By Professor TROUSSEAU.  
(*Journal de Médecine*, from *Ibid.*)

The object of this paper is to caution practitioners against the abuse of alkalies. These remedies exercise an immense influence on the economy. If by their use the alkaline state of the blood is increased, all the secretions from that fluid are modified. The secretions which are naturally alkaline become more so, those which are neuter will become alkaline, and those which are acid will become either less acid, or more or less alkaline. The presence of acids being one of the conditions for the digestions of food in the stomach, it cannot be a matter of indifference to neutralize the acids which the economy wants—for the transformation of fecula into glucose, for instance. The digestion of amylaceous substances becomes, therefore, incomplete, or extra-natural, if we may use the expression. The presence, also, of alkalies in the blood in due proportion, gives to this liquid the means of burning, to a certain extent, the carbonaceous elements absorbed in the process of digestion. An imperfect combustion gives rise, without doubt, to morbid symptoms; but a too great or too rapid combustion, on the other hand, is not the less attended with inconvenience, as it gives rise to important mutations in the composition of the blood, and consequently in the texture of the organs.

It is, therefore, under no circumstance unimportant to administer alkalies. Taken without any real indication for a few days, they only give rise to momentary disturbance, but, taken in large quantities, they occasion a cachectic condition, followed by a deplorable state of emaciation. The ancients have admirably indicated the influence of alkalies on the composition of the blood: they had remarked that it became more fluid, being paler than in the normal state; and that at last a cachexia became established, characterized by paleness, general puffiness of the tissues, and passive hemorrhage; moreover they had also perceived, that these symptoms were followed by emaciation. Within the last few years, the abuse which has been made of the mineral waters of Vichy and Carlsbad, in the treatment of gout, has proved the above fact. The abuse of alkalies has certainly done more harm than that of iodine.

How is it that physicians do not see that a remedy powerful to cure is also powerful to do evil? Alkaline remedies are daily administered with inconceivable indifference. A physician prescribes to a patient one or two months' use of the waters of Vichy, Carlsbad,

or Ems, as he would barley-water to drink. Is it a matter of so little importance to change all the secretions of the economy? Other alterative medicines are wielded with more prudence. Mercury and iodine, for instance, are administered with care and precaution, because the danger which attends their use is known.

In conclusion, Prof. Trousseau unhesitatingly states, that the danger of alkalies is greater than that of mercurials, because the danger is less suspected, and that their administration is often only arrested when the health of the patient has been irreparably destroyed. This is not so often the case with mercurials, because the experience of three centuries has told us that mercury could not be taken long with impunity. It behooves us, therefore, to make generally known both the immense utility and the extreme danger of alkaline remedies.

---

*On the Use of Quinine.* By A. W. BENTON, M. D., of Sterling, Whitesides county, Ill.—(Ill. and Ind. Med. and Surg. Journ.)

What is the condition of the system, and what the indications which require the use of quinine?

As much as has of late been written upon the use of quinine, the answer to the above question seems still to be a desideratum in the practice of medicine. The science of medicine can be improved only by a long and careful observation of facts and phenomena as they occur around us.

These facts have to be collected, compared, and their different relations and bearings carefully noted, before any definite law, or rule of action, can be established.

As these facts and phenomena are not confined to the observation of a favored few, but are spread abroad upon the open page of nature, it often happens that a man in the humbler walks of life may discover some important truth, which the far directed ken of a more eminent man may have overlooked. Or, if he is not so fortunate as to make any new discovery, he may at least observe some trifling circumstance, that may go far to establish the truth of some previous discovery.

This being the case, it is the duty of every physician to be vigilant at his post, however limited the sphere of his observation.

It seems to me that some are too indiscriminate in the use of quinine, while others are too cautious. That quinine has a decided and specific action upon the system, under certain circumstances, is a well established fact.

This being the case it must be adapted to some peculiar state of the system, indicated by a certain train of symptoms. What this state of the system is, and what are its symptoms, have been subjects of study and observation with me for the last seven years, the length of time I have resided in Illinois.

The result of my observations is, that an impoverished and morbid state of the blood, causing a diminution of the contractility of the heart and arteries, and functional action of the capillary vessels, constitute that state of the system which calls for the use of quinine. And that this state is indicated by a more or less well marked tendency to exacerbation and *remission*, if not intermission: and never characterized by that hard, unyielding, and bounding pulse which attends acute inflammation.

In the height of a paroxysm of fever, the pulse may approximate to the character of an inflammatory pulse, but still I have always found it to lack that hardness which it assumes in inflammation. The coats of the artery do not feel so rigid, and tense, and unyielding. The action of the heart and arteries seems to be more of a tumultuous action, as if it proceeded from irritation, as I believe it does; and that irritation caused by an accumulation of blood in the large vessels; and this accumulation, in its turn, produced by the previous diminished action which proved insufficient to carry on the natural circulation through the capillary system of vessels; which are, at the same time, laboring under, or rather ceasing to labor under, a diminished supply of nervous energy or influence.

The true theory of intermittent fever seems to me to be something like the following:

A vitiated state of the atmosphere, consisting probably in the admixture of some exhaled gaseous matter, together with a changed electrical condition, imparts to the blood an unhealthy, or morbid quality. This morbid blood, together with the electrical change, produces a diminished energy in that portion of the nervous system which presides over the circulating and organic functions of the body.

The consequence is, the blood does not stimulate the heart and arteries sufficiently to keep up their accustomed contractility, and elasticity. The capillaries at the same time are incapacitated for the performance of the functions assigned them.

From all this results a diminished action of the heart, arteries, and capillaries, insufficient to carry on the circuit of the circulation—the blood ceases gradually to find its way into the small vessels, and gradually accumulates in the large vessels.

When the capillaries get sufficiently empty, the consequence is a rigor or chill. When the large vessels get sufficiently full, or full for a sufficient length of time, the consequence is irritation and reaction, which forces the circuit of circulation till an equilibrium is established; then the reaction ceases, leaving the system in comparative health.

Then again, during the intermission, commences and continues the same diminished action, and gradual accumulation of blood in the larger vessels, and emptiness of the capillaries, till the same phenomena, in a longer or shorter period, are again produced; thus accounting for the periodicity of agues.

The action of quinine I conceive to be to neutralize the sedative



---

poison of malaria, and restore to the blood its appropriate stimulus for calling into action the heart, arteries and capillaries, giving them tone, vigor, and stability of action.

---

### PART III.—MONTHLY PERISCOPE.

*On the Results of Drinking.* By W. ORMEROD, Esq.—Of all diseases of internal organs produced by drinking, the granular liver seems to have attracted most attention; perhaps justly; but there is no doubt, that of all organic diseases, the two most to be feared in intemperate persons with recent surgical injuries, are the granular kidney, and slight, but general emphysema, with a dilated, but not always much diseased heart; and in persons past the middle of life, dying rapidly in hospitals after operations and surgical injuries, combined with much loss of blood, these two affections of the urinary and respiratory organs are very far from uncommon.

The three chief affections destroying patients after operations and injuries,—namely, the general habit produced by drinking; secondly, organic disease of the lungs and kidneys, especially emphysema in the former, and granular disease in the latter; and, thirdly, tubercle,—act very differently, and at different periods. During the early period, and often for weeks after operations, patients laboring under tubercular disease do well; and it is often only at the absolute return to health, rather than during the recovery of the patient from the operation itself, that the effects of tubercle begin to show themselves. Organic disease produced by drunkenness, and habitual drunkenness, act differently; the organic disease presses heavily at every period, and may destroy life early or late; but the mere habits of the drunkard show themselves chiefly at a very early period. The patient who nearly sinks from his unsound organs within the first few days, often lags on for weeks and months in danger; but the man who has simple delirium tremens is taken ill directly, and often dies; but if he recovers from his delirium, he generally gets well from the operation, and sometimes quickly.—[*London Lancet*.]

---

*The proper Diet when Preparations of Iodine are used.*—Dr. Moj'sicovics subjects his patients to the following alimentation, when they are under the preparations of Iodine: At breakfast, pure milk or mixed with an infusion of green tea—broth or coffee and milk. He prefers, however, tea, because of its diaphoretic properties. At dinner, broth or soup, beef well cooked and vegetables. If the appetite is considerable, cooked fruits may be permitted. No bread, but if the patient cannot do without it, allow a hard biscuit. Dinner ought then to be taken three hours after a dose of the medicine. For drink, water; but if necessary a little generous wine. If any

supper, let it be milk and tea, or cooked fruit. Children and feeble patients ought to live chiefly upon milk.—[*Arch. Générales de Méd.*

How few patients are subjected to any alteration of diet when they take iodine? And yet, how easily is it decomposed!—[*Edts.*

*To distinguish apparent from real death.*—M. Mandl has declared to the Academy of Sciences in Paris, that apparent death can be distinguished from real by a burn to the second degree. In the first state a blister will be formed, and in the second, or when death has occurred, nothing of the kind will be produced.—[*Archives Gén. de Méd.*

*Vapor of Ether in Asthma and Hooping-cough.*—Dr. Willis makes the following observations on the subject in the Medical Gazette:—

“Ether, given by the mouth, has long been familiarly employed in the treatment of asthma. I have for many years been aware of the fact that it has been vastly more efficacious administered directly in vapour by the breath. My plan of using it is extremely simple. I have had recourse to no kind of apparatus for this purpose, but have been content to pour two, three, or four drachms of the fluid upon a clean handkerchief, and to direct this to be held closely to the mouth and nostrils; a single short and difficult inspiration is hardly made before the effect is experienced; and I have occasionally seen the paroxysm ended in six or eight minutes, the respiration having in that brief interval become almost natural.

“It is not otherwise with hooping-cough; the paroxysms of coughing are positively cut short by having the ether and the handkerchief in readiness, and using them when the fit is perceived to be coming on. So effectual have I seen their immediate application, that I have even found it necessary to suffer the patient to have an occasional fit of coughing to its natural termination, with a view to clearing the chest from accumulated mucus.”—[*Medical News.*

*Case of Poisoning by Camphor.*—By Dr. E. O. BROWN, of Ky. The following case of convulsions, brought on by an over dose of camphor, will probably interest the readers of the Journal. It is the second case of the kind that has occurred within a short time in Bradenburg.—[*Western Journ. of Med.*

Mr. A., a stout, robust man, on the 27th January, 1847, bought an ounce of gum camphor, had it put up in paper as usual, placed it in his pocket, and went to church. While there he would frequently pinch off small pieces and chew and swallow them, not noticing the quantity taken. After church he, with his father and brother, left town for home. When they had proceeded about one mile on their way, the two brothers were riding together, when suddenly the one who had taken the camphor drew up his bridle, as though he was going to stop his horse, threw himself back and fell to the ground. Upon going to his assistance they found that he was powerfully convulsed; in a short time a second and a third convulsion followed. A

gentleman passing at the time who was in the habit of bleeding, bled him, conveyed him to the nearest house, placed him in a warm bath, and gave some medicine. He remained speechless, and perfectly unconscious of all that was going on for several hours. After some hours he gradually recovered his speech, but stated that he could not recollect any of the transactions of the evening on which the accident happened. He remained stupid, languid, and rather wandering all next day, but gradually recovered his former condition, and has enjoyed his health and spirits as usual since.

The foregoing history I derived from the father of the individual affected. The weight of the camphor sold by the druggist was ascertained, and on weighing it again it appeared that it had lost *one hundred and ten grains*. It may be concluded, therefore, that the young man swallowed something like that amount of the substance.

*The endermic application of Belladonna for Neuralgia.*—Prof. Lippich, of Padua, employs the following formula when he desires to have recourse to the ext. of Belladonna:

Take Mucilage of Gum Arabic, 300 grains.

Extract of Belladonna, 8 grains. Mix well together. Apply upon the surface previously denuded by a blister.

M. Lippich in this manner has seen rapid and complete success in various cases of rheumatismal lumbago, cephalalgia, &c., &c.

[*Gazette Médicale.*]

*Solution of Hydriodate of Arsenic and Mercury.*—Arcenici et hydrargyri hydriodatis, liquor of Mr. Donovan, of Dublin.—Iodoarseniate of mercury of Soubeiran. Arsenic, mercury, and Iodine being in some respects similar to each other in some of their effects, and occasionally prescribed in a solid form, Mr. Donovan was induced to propose the more perfect form of a chemical solution. This is of a yellow colour, with a tinge of green, styptic in taste. Each f 3j of solution (water) contains protoxide of arsenic gr.  $\frac{1}{8}$ , protoxide of mercury gr.  $\frac{1}{4}$ , iodine (converted into hydriodic acid) gr.  $\frac{4}{5}$ , chemically combined together. Mr. Donovan gives the following directions for preparing it:

Triturate 6·08 grs. of finely levigated metallic arsenic, 15·38 grs. of mercury, and 49·62 grs. of iodine, with f 3j of alcohol, until the mass has become dry, and from being deep brown has become pale red. Pour on aq. dist. f 3 viij, and after trituration for a few moments, transfer the whole to a flask; add 3 ss. of hydriodic acid, prepared by the acidification of gr. ij of iodine, and boil for a few moments. When the solution is cold, if there be any deficiency of the original f 3 viij, make it up exactly to that measure with distilled water.

*Action. Uses.*—Alterative, stimulant, effective in various obstinate skin diseases, as lepra, psoriasis, &c.

D. ℞—f 3 ss, three times a day in distilled water. Externally, f 3 j, to aq. dist. f 3 j, as a lotion. (Royle.)—*Ranking.*



*Follicular Disease of Vulva.*—Arg. nit and nitric acid are of no use. Hydrocyanic acid lotion is serviceable, or an ointment made of two drachms of prussic acid and a scruple of diacetate of lead, with two ounces of cocoa-nut oil. The parts are to be first washed with infusion of roses, and the ointment applied two or three times a-day on lint.

Or try a lotion of lime water with opium; or make a poultice of bread, saturated with decoction of conium leaves, to a pint of which add two drachms of the liq. plumbi diacet.

When irritation is excessive, prescribe vapor-baths, either simple or medicated with sulphur. Attend to general health, order a nutritious but unstimulating diet; avoid wine and porter; give milk with lime water; keep the patient at rest; forbid sexual intercourse. There should be change of air. Give the vegetable tonics, as cascarrilla, calumba, cinchona, sarsaparilla, &c.; keep the bowels open with small doses of magnes. sulph., in infusion of cascarrilla or chamomile. When the symptoms are decidedly abating, give a mild mercurial course with sarsaparilla. (Mr. Oldham.)—*Braithwaite.*

*Remarkable Case of Ascites.*—(N. Y. Journ. Med.) Dr. Lee: Agreeably to your request, I send you the short memorandum of the case of Mrs. Hurlburt, which I took from Mrs. H., with the assistance of her son, Rev. W. Hurlburt.

CASTLETON, July 15, 1841.—Mrs. Hurlburt, a widow lady, in middle walks of life, aged 49 years, had paracentesis abdominis performed on her nine years since, for the first time,—since which she has been tapped no less than forty-three times.

The average quantity of water drawn was fifty-five pounds,—the greatest quantity at any one time was seventy-seven pounds.

For the last three or four years, preceding October, 1840, the operation was performed about once every four weeks. As the average was fifty-five lbs. it follows that the whole amount drawn, was two thousand three hundred and sixty-five pounds! being nearly three hundred gallons. It should be added that the water ceased to collect from October, 1840.

I am, sir, very respectfully, your most obedient and humble servant, &c.

E. BARNES, M. D.

Geneva, Dec. 23, 1846.

*New Mode of Diagnosing Tumors.*—Dr. Kuss, Prof. of Physiology to the Faculty of Medicine at Strasburg, proposes a small trocar or needle with a small furrow, by which tumors are penetrated and the small quantity of matter they contain thus extracted, is subjected to a microscopical examination. The editor of the *Gazette Médicale* says he has known in three cases the diagnosis furnished by this little instrument prevent an operation already decided upon, when the cancerous nature of the tumors were demonstrated by it.—[*Gazette Médicale.*

*Extraction of a Pin from the Urethra.*—M. Raynaud relates the case of a child 8 years old, who, two days before, had introduced a pin, the head first, into his urethra. He now experienced acute pain in the perineum and anus, with frequent desires to urinate. Nothing was detected in the urethra by external palpation, but the finger introduced into the anus felt the head of the pin. M. R. succeeded in extracting it, by introducing a large metallic catheter down to it, pressing gradually behind the pin as he slowly withdrew this instrument, he had the satisfaction to see it appear at the orifice of the urethra.—[*Ibid.*]

*Removal of Cataract by Aspiration.*—In the Archives Générales de Médecine, we find M. Laugier, a young surgeon of some eminence in Paris, proposing a small hollow needle, with which to penetrate the eye and the crystalline lens, and then to adapt to its external extremity a small sucking pump, and by this means extract fluid cataracts. He speaks of one successful operation by his instrument.

*On Extraction of the Placenta before the Child.*—At the termination of a paper on the "History, Causes, and Treatment of Placenta Previa," Dr. Edwards thus speaks of Dr. Simpson's proposal:

Experience will decide in what varieties of placenta previa this practice is most admissible; but from what we can glean at present, it seems peculiarly indicated—

1. Where the patient is of so weakly and delicate a constitution that loss of blood to any great extent would be attended with present danger, and subsequent injurious effects.
2. Where the child is well ascertained to be dead.
3. In cases in which the powers of life have been excessively lowered by the hemorrhage, and the os uteri remains firm and unyielding.
4. In cases in which, although the os uteri is dilatable, the powers of life would be unequal to the shock of turning.
5. In primiparæ, when the soft parts are so contracted that they would be liable to be bruised or torn in turning.
6. In contracted pelvis.—[*Lancet.*]

*Exhibition of Assafœtida during Pregnancy.*—Dr. G. Laferla, of Malta, recommends strongly this substance in doses gradually increasing from two grains to ℥j. daily, for the purpose of preventing the death of the fœtus *in utero*. The cases which Dr. Laferla particularly points out are those in which before labor the fœtus ceases to live without any appreciable cause—a circumstance which sometimes shows itself in several successive gestations. Dr. Laferla reports several cases in which the patients had two, three, and four times been delivered of still-born children, and afterwards under the influence of assafœtida, gave birth to living infants.—[*Revue Médico-Chirurg.*, and *Med. News.*]

*Fatal Effects of Inhalation: Inquest.*—An inquest has been held on a young woman, the wife of a hair-dresser, at Spittlegate, in the county of Lincolnshire, from whom a tumor had been removed while under the influence of ether. She never rallied, and died without the slightest reaction having taken place, sixteen hours after the operation. The following verdict was returned :—"That the deceased, Ann Parkinson, died from the effects of the vapor of ether, inhaled by her for the purpose of alleviating pain during the removal of a tumor from her left thigh, and not from the effect of the operation, or from any other cause." The surgeon who performed the operation stated that he fully concurred in the verdict, as he had no doubt whatever that the ether alone was the cause of death, and it was a duty he owed to the public to say so.—[*Prov. Medical Journal*.]

We are not certain that the ether produced death in this case. What was the size of the tumor—what its nature? Did the operation produce no effect upon the patient's system? If she died from the ether alone, ought it not to have been before the lapse of sixteen hours. But it may have been the sole cause of this death.—[*Edts.*]

*Bromide of Potassium as a substitute for the Iodide.*—The low price of the bromide compared with that of the iodide of potassium, has induced M. Ricord to substitute the former for the latter in the treatment of secondary syphilitic affections. The dose of the bromide is the same as of that of the iodide of potassium. It has produced the same therapeutical effects, but more slowly.—[*Journ. de Pharmacie*, from *Am. Journ. Med. Sciences*.]

---

## MEDICAL INTELLIGENCE.

### NATIONAL MEDICAL CONVENTION.

We trust that no apology to our readers is necessary for the space which is occupied by the proceedings of the National Medical Convention which has recently been held in Philadelphia. The high character of that body, the importance of the subjects upon which it was called to deliberate, and the deep interest which medical men must feel in the great movement to elevate their profession, has induced us to give the whole proceedings as reported by the Philadelphia Press. In the next number we will proceed to publish such reports of the committees as will be of general interest, accompanied by such remarks as in our judgment may be called for.

WEDNESDAY, MARCH 5, 1847,

This morning, at ten o'clock, the Delegates to the Second Annual Convention of the above named body, whose object is to devise measures for the protection of their interests, the maintenance of their honor and respectability, the advancement of their knowledge, and the extension of their usefulness, assembled in the hall of the Academy of Natural Sciences, at the corner of Broad and George streets.

The Convention was called to order by Dr. Isaac Hays, Chairman of the Committee of Arrangements of the Philadelphia delegation, who nominated for tem-



porary organization, Dr. J. KNIGHT, of Connecticut, as Chairman, and *Dr. Rich'd D. Arnold*, of Georgia, and *Dr. Alfred Stillé*, of Philadelphia, as Secretaries.

Dr. Hays moved that a Committee of five be appointed to receive and examine the credentials of the Delegates, and report the same to the Convention; which was agreed to.

The chairman then appointed the following gentlemen—Drs. R. D. Arnold, of Georgia, T. W. Blatchford, of New York, Robert W. Haxall, of Virginia, E. H. Bishop, of Connecticut, Thompson, of Delaware.

On motion of Dr. Smith, of New York, a committee of one from each State represented in the Convention, was appointed to nominate officers for the permanent organization of the Convention.

Dr. Hall, from Vermont; Dr. Holmes, Massachusetts; Dr. Twitchell, N. H.; Dr. Dunn, R. I.; Dr. E. Ives, Conn.; Dr. Stearns, N. Y.; Dr. Cole, N. J.; Dr. Norris, Pa.; Dr. Baker, Del.; Dr. Gibson, Md.; Dr. Welford, Va.; Dr. Lindley, Dist. Col.; Dr. Mitchell, Ky.; Dr. Garvin, Ga.; Dr. Moultrie, S. C.; Dr. Buchanan, Tenn.; Dr. Pierce, Mich.; Dr. Frye, Ill.; Dr. Carpenter, La.; Dr. Keirn, Miss.; Dr. Bullitt, Mo.; Dr. Shipman, Ia.; Dr. Butterfield, Ohio.

The States of Maine, Alabama, Arkansas, Wisconsin, Texas, Iowa and Florida, were not represented.

The committee appointed to examine the credentials of Delegates to the Convention, reported through their chairman, Dr. Arnold, the following list of delegates present.

*New Hampshire Medical Society*—Drs. Josiah Crosby, Amos Twitchel, F. P. Fitch, A. O. Dickey, J. Bartlett.

*Dartmouth Medical College*—Dr. Edward E. Phelps.

*Vermont Medical College*—Dr. Alonzo Clarke.

*Vermont Medical Society*—D. C. Hall, C. W. Horton, A. G. Dana, D. Story.

*Faculty of Castleton Medical College*—Dr. T. M. Marcoe.

*Massachusetts Medical Society*—Drs. Z. B. Adams, A. L. Pierson, W. Bridgman, S. Parkman, G. C. Shattuck, J. Jeffries, S. W. Williams, E. Huntingdon.

*Middlesex District Medical College*—Drs. J. Curtiss, N. Cutler, J. W. Graves.

*Faculty of Medicine in Harvard University*—Dr. O. W. Holmes,

*Berkshire Medical Institute*—Dr. Alonzo Clark.

*Rhode Island Medical Society*—Drs. Theop. C. Dunn, Usher Parsons.

*Connecticut Medical Institution of Yale College*—Drs. J. Knight, Eli Ives.

*Connecticut Medical Society*—Drs. George Summer, N. B. Ives, B. F. Barker, E. Baldwin J. C. Hatch, W. B. Carey, A. Skinner, E. Middlebrook.

*New Haven Medical Association*—Dr. E. H. Bishop.

*Medical Society of New Jersey*—Drs. Linden A. Smith, E. J. Marsh, W. Forman, F. S. Schenck, W. Pierson, B. P. Howell, J. F. Garrison, J. Parrish, O. H. Taylor, R. M. Cooper.

*District Medical Society of Burlington*—F. N. W. Cole, R. H. Stratton, Z. Read.

*Medical Society of the City and County of New York*—Drs. T. Cook, A. Smith, John B. Beck, J. K. Rodgers, J. M. Smith, J. Foster, F. N. Johnston, G. Buck, G. P. Camman, W. M. Blackeman, A. G. Thompson, J. Green, J. R. Van Kleek, S. T. Hubbard.

*New York Academy of Medicine*—Drs. F. Campbell Stewart, J. R. Wood, H. D. Bulkley, Valentine Mott, A. B. Stout, S. C. Connaut Foster, R. S. Kissam, D. M. Reese, E. L. Beadle, J. Linsly, O. S. Bastles, C. D. Smith, M. Hoit, W. H. Van Buren, J. O. Pond,

*College of Physicians and Surgeons in the City of New York*—Drs. J. Stearns, J. W. Francis, J. R. Manley, E. G. Ludlow, J. A. Wing, D. Ayres, T. W. Blatchford, D. Clark, M. Snyder, J. S. Sprague, J. McCall, A. Willard, N. S. Davis, P. H. Hurd, M. Strong, Alex'r Thompson, L. R. Telf, G. W. Bradford, E. Barnes.

*Rensselaer County Medical Society*—Drs. A. Watkyns, S. A. Cook.

*Troy Medical Society*—Dr. A. Watkyns.

*Erie County Medical Society*—Dr. B. Burwell.

*Courtland County Medical Society*—Dr. B. Burwell.

*New York Medical and Surgical Society*—Drs. J. A. Sweet, J. G. Adams, A. Dubois, P. Earle, J. McDonald.

*University of New York*—Drs. V. Mott, G. S. Pattison, J. W. Draper, G. S. Bedford.

*Medical Department of the University of Buffalo*—Dr. A. Flint.

*Medical Faculty of Geneva College*—Dr. C. A. Lee.

*Albany Medical College*—Drs. A. Marsh, J. McNaughton, T. R. Beck, Thomas Hun, D. Ayres, jr.

*New York Pathological Society*—Drs. J. Y. Metcalf, H. Walsh, T. M. Halsted, I. Moses.

*New York Hospital*—Drs. J. H. Griscom, J. Watson.

*Pennsylvania Jefferson Medical College*—Drs. J. Mitchell, Franklin Bache, Thos. D. Mutter.

*Medical Institute of Philadelphia*—Dr. John Neill.

*Northern Medical Association of Philadelphia*—Drs. Wilson Jewell, B. S. Janney, M. B. Smith, J. Uhler, A. Naudain, J. Pennington, H. J. Brown, J. R. Bryan, W. S. Haines, W. Mayberry, A. C. Hart, J. D. Stewart

*Pennsylvania College*—H. S. Patterson, John Wilbank, W. L. Atlee.

*College Physicians, Philadelphia*—Drs. D. F. Condie, C. D. Meigs, J. Carson, R. La Roche, C. R. King, Isaac Hays, J. Jackson, J. Rodman Paul, Alfred Stille, William Pepper, George Fox, Robert Bridges, Jacob Randolph, J. Wilson Moore, Casper Morris.

*University of Pennsylvania*—Drs. Nathaniel Chapman, Samuel Jackson, George B. Wood.

*Philadelphia College of Medicine*—Drs. J. R. Burden, J. McClintock.

*Lancaster City and County Medical Society*—Drs. J. R. Eshelman, J. Winters, Samuel Humes, Samuel Duffield, J. L. Atlee, G. B. Kerfoot, Henry Carpenter.

*Franklin Medical College*—Drs. J. B. Rodgers, D. F. Tucker, L. S. Joynes.

*Philadelphia Medical Society*—Drs. J. Bell, G. Emmerson, J. Parrish, G. A. Norris, T. West, W. Ashmead, B. H. Coates, H. Bond, S. G. Morton, T. H. Yardley, G. D. Griscom.

*Medical Society of the State of Delaware*—Drs. J. M. Thomson, J. Cooper, W. N. Hamilton, W. W. Morris, G. Saulsbury, W. Cummins, W. W. Wolf, W. W. Stuart, W. M. L. Risards.

*Medical Association of the City of Wilmington*—Drs. H. F. Asken, G. W. Baker, L. P. Bush, R. R. Porter.

*Medico Chirurgical Faculty of Maryland*—Drs. C. M. Roberts, J. R. W. Dunbar, A. C. Robinson, J. H. Briscoe, R. A. Durkee, J. Hopkins.

*Association of Medical College of Frederick City*—Dr. S. Tyler.

*Washington University of Baltimore*—Drs. Charles B. Gibson, W. T. Leonard.

*Medical Society of the District of Columbia*—Drs. F. Howard, H. Lindsly, Joseph Burrows.

*Medical Department of the Columbia College*—Drs. Thomas Miller, J. Riley, J. F. May.

*Medical Convention of Virginia*—Drs. B. R. Wellford, H. H. McGuire, J. L. Cabell, J. F. Peebles, M. H. Houston, H. Massie, W. Selden, G. L. Corbin, D. Trigg.

*Medical Society of Virginia*—Drs. R. W. Haxall, S. A. Patterson, J. Conway, Charles S. Mills, F. Marx, James Beale, J. Dove, T. Nelson, J. A. Cunningham, F. H. Deane, George G. Minor, John N. Brooks, R. G. Cabell, Carter P. Johnson, H. P. Taliaferro, W. A. Patterson.

*Petersburgh Medical Faculty*—Drs. J. F. Peebles, J. J. Thweatt, B. H. May, J. E. Cox, R. E. Robinson.

*Medical Society of Montgomery Co.*—Drs. G. W. Thomas, H. Corson, J. L. Foulke.

*Medical Society of South Carolina*—Drs. J. Moultrie, W. T. Wragg, J. P. Jervey.

*Georgia Medical Society*—Drs. R. D. Arnold, J. B. Tufts.

*Medical College of Georgia*—Drs. I. P. Garvin, L. A. Dugas.

*Mississippi State Medical Society*—Drs. G. Kern, W. Leake, J. May.

*Indiana Medical College*—Drs. A. B. Shipman, G. W. Richards, M. L. Knapp, Dan'l Meeker.

*Medical Department of the Transylvania University of Kentucky*—Drs. E. Bartlett, T. D. Mitchell, S. Arunan.

*Medical Society of the State of Tennessee*—Dr. A. H. Buchanan.

*Medical Department of the University of Louisiana*—Drs. J. Harrison, W. M. Carpenter, A. J. Wedderburn.

*Medical Department of the St. Louis University*—Drs. H. M. Bullit, A. Linton.

*St. Louis Association of Physicians*—Dr. D. E. Meade.

*Rush Medical College, Chicago*—Dr. J. C. Frye.

*State Medical Society of Michigan*—Dr. J. Pearce.

*Medical Chirurgical Society of Cincinnati*—Dr. David Judkins.

*Ohio Medical Convention*—Drs. S. St. Johns, J. Butterfield.

*Willoughby Medical College*—Dr. John Butterfield.

The committee on Credentials made a report, which was accepted, and the committee was directed to continue to receive the credentials of such delegates as may hereafter arrive.

Dr. Holmes, chairman of the committee on offices, reported the following named gentlemen as the permanent officers of the Convention:

Dr. J. KNIGHT, of Connecticut, President.

*Vice Presidents*—Alexander H. Stephens, of New York; G. B. Wood, of Philadelphia; A. H. Buchanan, of Tennessee; John Harrison, of Louisiana.

*Secretaries*—R. D. Arnold, of Georgia; A. Stille, of Philadelphia; F. C. Stewart, of New York.

The Convention unanimously agreed to the report of the committee.

Several propositions were made to admit gentlemen of the Medical profession, not delegates to the Convention, to seats in the body, all of which were voted down.

The Convention then proceeded to the consideration of the report on the subject, (which was referred to a committee at the last meeting of the Convention, in 1846,) of instituting a National Medical Association, for the protection of the Medical Profession, &c. The name of the Association to be the American Medical Association.

On motion of Dr. WATSON, of N. Y., the report was laid on the table, and the same ordered to be printed.

The Convention next took up the report, accompanied by an address of the committee of the last Convention appointed to consider the expediency, &c., if deemed expedient, of the mode of recommending and urging upon the several

State governments, the adoption of measures for a registration of the births, marriages and deaths of their several populations.

The Report was accepted, and the address adopted, and ordered to be printed. On motion, the Convention adjourned till 7 o'clock in the evening.

—  
EVENING SESSION.

7, o'clock, P. M. The Convention met, when reports of several committees appointed at the meeting in 1846, were read, laid upon the table, and ordered to be printed. The Convention then adjourned to 9 o'clock Thursday morning.

—  
THURSDAY MORNING, May 6th.

The Convention re-assembled at 9 o'clock this morning, in the saloon of the Academy of Natural Sciences. The attendance was very full. The committee on credentials submitted the names of the following gentlemen as additional delegates to the Convention:—

Castleton Medical College, Vermont—Dr. Green.

Medical and Chirurgical Faculty of Maryland—Dr. John H. Briscoe.

Centre County Medical Society—Dr. Wm. J. Wilson.

Montgomery County Medical Society—Dr. George W. Thomas.

Brooklyn Hospital—Dr. Daniel Ayres.

The minutes of the last meeting were read and approved. After which, Dr. Stewart, one of the secretaries, called the roll of the members.

Dr. Griscom, of New York, offered the following resolution:—

That a committee of five be appointed by the chair to consider and report to the Convention measures for defraying its expenses.

The chair appointed the following committee:—Drs. Bell, of Philadelphia; March, of Albany; Smith, of New York; Welford, of Va.

An invitation from the managers of the Institution for the Instruction of the Blind was received, asking the members to visit that place.

Dr. Bell, of Philadelphia, presented a letter from Dr. Lewis W. Chamberlayne, of Hampden Sydney College, Va., as the representative of the Medical Faculty of that Institution, explaining why a delegation from their body was not present, and expressing their concurrence in the objects that have brought the Convention together.

Dr. Bell, from the committee on Medical Ethics, reported the introduction to the code, submitted on Wednesday evening, which report was ordered to be printed.

Dr. N. S. Davis, of New York, offered the following resolution:—

That a committee of one from each state represented in the Convention be appointed, whose duty it shall be to investigate the *indigenous medical botany* of our country, paying particular attention to such plants as are now or may hereafter, during the time of their service, be found to possess valuable medicinal properties, and are not already accurately described in the standard works of our country, and report the same in writing, giving not only the botanical and medical description of each, but also the localities where they may be found, to the next annual meeting of the American Medical Association. Laid on the table.

Dr. McNaughton, of Albany, from the committee to whom had been referred the resolution passed by the last Convention, which states "that the union of the business of *Teaching and Licensing* in the same hands, is wrong in principle and liable to great abuse in practice. Instead of conferring the right to license on Medical Colleges, and State and County Medical Societies, it should be restricted to one Board in each State, composed in fair proportion of representatives from its Medical Colleges and the profession at large, and the pay for whose services as examiners should in no degree depend on the number licensed by them," made a report in reference to the subject, mainly sustaining the above resolution. The report, however, states that the committee do not desire to say that the union referred to is wrong in *principle*—the objectionable conduct which may have occurred, is, in their opinion, attributable to some other cause. The committee in all other respects express their accordance with the sentiments contained in the resolution. The report and the accompanying resolutions were ordered to be printed.



Dr. Parrish, of Philadelphia, submitted a majority report on the same subject, and in opposition to a change in the present order of things in relation to licensing, and recommending that some additional checks be put upon the exercise of the right.

The report and accompanying resolutions were ordered to be printed.

Dr. Shipman, of N. Y., moved that Dr. Thos. Spencer, of Geneva, N. Y., now visiting the city, be requested to take part in the proceedings, but not to vote—agreed to. A similar motion prevailed in regard to Professor Hare, of this city.

Dr. Thompson, of Delaware, from the committee to prepare a nomenclature of diseases adapted to the United States, having reference to a general registration of deaths, made a report containing some interesting comparative statistical information in regard to various diseases, and concluded with a deserved tribute of praise to Mr. Emanuel Shattuck, of Boston, who drew up the report. The report was ordered to be printed.

Dr. Cooper, of Del., moved that the report of the committee on Preliminary Education, with the appended resolutions, be taken up for the consideration of the Convention.

A debate arose on the question of a postponement of the subject at present.

On motion, the report was again read. The report states that the object to which the committee has directed its labors, it is believed, can be best effected by the following resolutions:

1st. Resolved, That this Convention earnestly recommends to members of the medical profession throughout the United States, to satisfy themselves, either by personal inquiry or the written certificate of competent persons, before receiving young men into their offices as Students, that they are of good moral character, and that they have acquired a good English education, a knowledge of Natural Philosophy and the Elementary Mathematical Sciences, including Geometry and Algebra; and such an acquaintance, at least, with the Latin and Greek languages, as will enable them to appreciate the technical language of medicine, and read and write prescriptions.

2d. Resolved, That this Convention also recommends to the members of the medical profession of the United States, when they have satisfied themselves that a young man possesses the qualifications specified in the preceding resolution, to give him a written certificate, stating that fact, and recording also the date of his admission as a medical student, to be carried with him as a warrant for his reception into the medical college in which he may intend to complete his studies.

3d. Resolved, That all the medical colleges in the United States be, and they are hereby recommended and requested to require such a certificate of every student of medicine applying for matriculation; and when publishing their annual lists of graduates, to accompany the name of the graduate with the name and residence of his preceptor, the name of the latter being clearly and distinctly presented, as certifying to the qualification of preliminary education.

The first resolution was taken up, and gave rise to a very animated debate, in which Drs. Watson, Stevens, Davis, Hearn, Atlee, Haxall, Manley, and others participated.

A number of amendments were made, and were severally acted upon and lost. The original resolution was passed.

The second resolution was then taken up.

Dr. Reese, of New York, moved to strike out the word "complete," and insert the word "pursue."

The resolution, as amended, was passed.

The third resolution was taken up, and amended as follows:

Resolved, That all the medical colleges in the United States be, and they are hereby recommended and requested to require such a certificate of every student of medicine applying for matriculation, and if it shall appear that any applicant has not previously read with a preceptor, medical colleges are hereby requested to satisfy themselves that the applicant possesses the qualifications specified in the first resolution, &c.

The amendment was passed.

A motion to reconsider was made, and while pending, the amendment was withdrawn by Dr. Cabell, of Va., its mover, and the original resolution was passed.

The report of the committee and the resolutions were passed. Mr. Hopkins, of Maryland, moved that no gentlemen shall be permitted to speak more than twice on the same proposition, and not to occupy more than ten minutes at one time. Several amendments were made and lost. The resolution was agreed to.

On motion of Dr. Hays, two hundred and fifty copies of the report and resolutions on Preliminary Education, as passed by the Convention, were ordered to be printed.

Dr. Haxall, of Va., read to the Convention a communication, received from the Medical and Chirurgical Faculty, of Baltimore, inviting the Convention to hold its meeting in the year 1848, in the city of Baltimore, which was laid on the table for the present.

On motion, the Convention adjourned to meet again at 5 o'clock, P. M.

—  
AFTERNOON SESSION.

The Convention met at 5 o'clock.

Dr. Pierce, of Michigan, offered the following resolution: That the members of this Convention be requested to ascertain, as far as may be practicable, and report to the next annual meeting, the number of practitioners of medicine in their respective States, designating the number who may have received a diploma from a Medical College, the number who may have been licensed by a Medical Society, and the number who practice medicine without any authority whatever. Passed.

Mr. Hays moved to take up the report under the fourth resolution.

Dr. Davis, of New York, moved that the Convention proceed to the consideration of the resolution attached to the report, as follows:

Resolved, 1st. That it be recommended to all the colleges to extend the period employed in lecturing from four to six months.

2d. That no student shall become a candidate for the degree of M. D. unless he shall have devoted three entire years to the study of medicine, including the time allotted to attendance upon the lectures.

3d. That the candidate shall have attended two full courses of lectures, that he shall be twenty-one years of age, and in all cases shall produce the certificate of his preceptor, to prove when he commenced his studies.

4th. That the certificate of no preceptor shall be received who is avowedly and notoriously an irregular practitioner, whether he shall possess the degree of M. D. or not.

5th. That the several branches of medical education already named in the body of this report, be taught in all the colleges; that not less than one hundred lectures be delivered by each Professor, and that the number of Professors be increased to seven.

6th. That it be required of candidates that they shall have steadily devoted three months to dissection.

7th. That it is incumbent upon Preceptors to avail themselves of every opportunity to impart clinical instruction to their pupils; and upon Professors to connect themselves with Hospitals whenever it can be accomplished, for the advancement of the same end.

8th. That it is incumbent upon all schools and colleges granting Diplomas, fully to carry out the above requisitions.

9th. That it be considered the duty of Preceptors, to advise their students to attend only such institutions as shall rigidly adhere to the recommendations herein contained.

All the resolutions were agreed to except the 7th, which was amended and passed as follows:—That it is incumbent upon preceptors to avail themselves of every opportunity to impart clinical instruction to their pupils; and that Medical Colleges require candidates for graduation to show that they have attended on Hospital practice for one season, whenever it can be accomplished, for the advancement of the same end.

Dr. Stewart, of New York, offered the following additional resolution, which was unanimously agreed to.

Resolved, That it be suggested to the faculties of the various medical institutions to adopt some efficient measures for ascertaining that their students are actually in attendance upon their lectures.

On the passage of the first resolution reported by the committee a warm debate arose, in which Professors Patterson and Hare and Doctors Kerfoot, Mitchell, Reese, Stevens, Haxall and others took part. Several amendments were also proposed to be made to it, which were severally acted upon and lost.

A letter of invitation was received by the Convention, to visit the Pennsylvania Hospital for the Insane.

The Convention adjourned until to-morrow morning at 9 o'clock.

#### FRIDAY MORNING, May 7th.

The Convention met to-day at 9 o'clock, A. M., in the Hall of Natural Sciences. The minutes were read and approved. The calling of the roll was dispensed with.

Drs. J. Redman Cox of this city, and Cheyney How of St. Louis, were invited to take seats on the floor.

On motion of Dr. Haxall of Va., the Convention reconsidered the following resolution, passed on Thursday:

That the several branches of medical education already named in the body of this report, be taught in all the colleges: that not less than one hundred lectures be delivered by each Professor, and that the number of Professors be increased to seven.

On motion of Dr. Haxall, the Convention agreed to an amendment to the resolution, by striking out the words "that not less than one hundred lectures be delivered by each Professor."

The committee on Credentials reported the names of the following additional delegates.

Centre County Medical Society, Drs. W. M. Wilson, John McCoy, Franklin R. Smith.

Medical and Chirurgical Faculty of Maryland, Drs. P. Worth, James, Bordly, Solomon Jenkins.

Lebanon County Medical Society, Drs. John W. Gloninger, David B. Marshall, Nathaniel Bank, Seth R. Smith, Benj. F. Schrech, Samuel Behn, Jeremiah Breidenback, Cyrus D. Gloninger, George Rex, Jonathan Jerbe, Henry Strine, D. S. Cooper, Dr. King of the U. S. Army.

On motion of Dr. Naudain, the report of the committee on the organization of the National Medical Association as ordered by the National Medical Convention held in the city of New York in May, 1846, was read. The report included the following resolution:

Be it resolved, in behalf of the Medical Profession of the United States, the members of the Medical Convention held in Philadelphia in May, 1847, and all others who, in pursuit of the objects above mentioned, are to unite with, or succeed them, constitute a National Medical Association, the name and title of the Institution to be "The American Medical Association."

On motion of Dr. Hays, the resolution was agreed to.

Dr. Hays moved the following:

Resolved, that the report be referred back to the committee, with instructions to report a plan of organization in accordance with the following schedule:

1st. The society to consist of members to be elected by the association directly, or through its council.

2d. Members before admission into the association, to sign a promise to conform to the laws of the association.

3d. Members who violate this pledge, to be liable to expulsion, and to be deprived of the rights of brotherhood.

4th. For the appointment of a council, to consist of the officers of the society, and a number of councillors, to be elected annually; the councillors to have the general superintendence of the concerns and publication of the associations, and to report proceedings to the association at its annual meeting.



Considerable discussion arose on the resolution, which was finally lost.

The Convention then resumed the consideration of the rules and regulations submitted by the committee, and after some amendments made by members which were accepted by the committee, the entire report was adopted.

On motion of Dr. Bush, of Delaware, the Convention proceeded to the consideration of the report of the committee on Medical Ethics, embraced in the following:

Of the duties of physicians to their patients, and of the obligations of patients to their physicians.

Of the duties of physicians to their patients.

Of the obligations of patients to their physicians.

Of the duties of physicians to each other, and to the profession at large.

Of the duties for the support of professional character.

Of the duties of physicians in regard to professional services to each other.

Of vicarious offices.

Of the duties of physicians in consultations.

Of the duties of physicians in cases of interference with one another.

Of the duties of physicians when differences occur between them.

Of the duties of physicians in regard to pecuniary acknowledgments.

Of the duties of the profession to the public, and of the obligations of the public to the profession.

Of the duties of the profession to the public.

Of the obligations of the public to physicians.

The report of the committee was adopted.

On motion, the Convention proceeded to consider the report of the committee appointed by the National Medical Convention, held in May, 1846, to consider the expediency and (if expedient) the mode of recommending and urging upon the several State governments the adoption of measures for a Registration of the Births, Marriages and Deaths of their several populations, respectively.

On motion of Dr. Griscom, of New York, the subject was referred to a Standing committee, to be appointed by the chair, to make a general charge of the subject, and report annually to the Convention.

The committee consists of Dr. S. Griscom, N. Y., Lee, Clark, Emerson, Arnold, Russ, Shattuck.

On motion of Dr. Stephens, of New York, a recess of ten minutes was taken, for the purpose of collecting the individual assessments for defraying the expenses of the Convention.

The Convention proceeded to consider the reports on the subject of the union of Teaching and Licensing.

Dr. Reese, of New York, offered the following:

Resolved, That the report of the majority of the committee, on the subject of separating the Teaching and Licensing power in Medical Colleges, be adopted by this Convention and publish its transactions.

Resolved, That the report of the minority be laid on the table, and printed in like manner.

Dr. Leonard, of Baltimore, offered the following amendment:

Resolved, That the two reports of the committee upon the subject of Teaching and Licensing be referred to the committee on Medical Education, with instructions to report to the next annual meeting of the "American Med. Association."

Dr. Reese accepted the amendment; after much debate the resolution was passed.

The Convention adjourned to meet again at 5 o'clock, P. M.

#### — EVENING SESSION.

The Convention again met at 5 o'clock, P. M. On motion of Dr. Smith, of Boston, it was resolved that the thanks of the Convention was due to officers and directors of various institutions, who have politely invited the members to visit them at their own convenience; to the committee on Reception and Arrangement, on behalf of the Philadelphia Delegation, for the spacious and elegant accommodations provided, and to the whole Medical profession of the city, for the marked kindness, personal attention, and general hospitality which have

characterized their intercourse with this body, since the commencement of its deliberations, and to the Academy of Natural Sciences, for the use of their room.

The following resolution was offered by Dr. Reese, of New York :

That a committee be appointed to draft a memorial to the Congress of the United States, asking that a portion of the Smithsonian fund may be annually appropriated to the uses of the American Medical Association. Laid on the table.

The following resolution was offered by Dr. Carpenter, of Lancaster :

Whereas, The difficulties which sometimes arise between physicians in their attendance upon the sick, are frequently owing to improper procedure or representations on the part of the patients or friends, from an ignorance of the etiquette which should govern the conduct of the respective parties towards each other ; therefore,

Resolved, 1st, That the President of this Convention appoint a committee of three, to select such parts of the code of Ethics adopted by this body, as they may deem expedient, and report the same to the Convention for approval, at its session to-morrow morning. 2d, That the committee of Publication have a sufficient number of copies of the same printed and delivered, or send to each delegate a suitable number. 3d, That delegates request the editors of the public journals in their respective localities, to publish the same, as proper and useful information for the people. Laid on the table.

On motion of Dr. Garvin, the thanks of the Convention were presented to its officers, for the very efficient manner in which they have discharged the onerous duties imposed upon them.

Dr. Stewart, of New York, offered the following :

Resolved, That all unfinished business be referred to the American Medical Association, about to be organized.

Resolved, That this Convention do now resolve itself into the "American Medical Association," and that the officers of the Convention continue to act as officers of the Association, until others are appointed. Agreed to.

On motion, the chairman appointed the following committee, consisting of one person from each State represented, to nominate officers of the Association.

Committee—Drs. Ashew, Delaware; Mitchell, New Hampshire; Hall, Vermont; Adams, Massachusetts; Dunn, Rhode Island; Ives, Connecticut; Manley, New York; Smith, New Jersey; La Roche, Pennsylvania; Dunbar, Maryland; Riley, District of Columbia; Garvin, Georgia; Keirn, Mississippi; Buchanan, Tennessee; Harrison, Louisiana; Linton, Missouri; Frye, Illinois; Shipman, Indiana; Judkins, Ohio; Annan, Kentucky.

On motion of Dr. Stewart, the committee on Registration appointed by the Convention, at its morning session, was confirmed by the Association.

The committee on Nominations reported the names of the following gentlemen, as officers of the "National Medical Convention"—

President—Dr. Nathaniel Chapman, of Pennsylvania.

Vice-Presidents—Drs. J. Knight, New Haven; A. H. Stephens, New York; Moultrie, South Carolina; Buchanan, Tennessee.

Secretaries—Drs. Stille and Dunbar, of Philadelphia.

Treasurer—Dr. I. Hays.

On the ballot being taken, the above nominees were elected officers of the Association for the ensuing year.

A committee was appointed to wait on Dr. Chapman, and inform him of his election.

On motion, the invitation from the delegation of Baltimore to the Association, to hold its next meeting in that city in May, 1848, was accepted.

The President was empowered to appoint the Standing committee of the Association.

The President elect was announced, and on taking the chair Dr. Chapman said—It has been my good fortune on many occasions to be complimented in the same manner, though not in the same degree—I confess my incompetence to serve you.

I love my profession, and I should be ungrateful if I did not. Whatever I possess in this life has been bestowed by her favors; when I forget her and her

disciples, may Almighty God forget me. The speaker concluded with an expression of his ardent wishes for the success of the cause, and said it would always be his great pleasure to advance the interests and maintain the dignity of the profession. On motion of Dr. Stewart, 2000 copies of the proceedings were ordered to be printed.

The Association adjourned to meet again in May, 1848, in the city of Baltimore.

**STATISTICS OF MEDICAL INSTITUTIONS OF THE UNITED STATES, FOR  
THE SESSION OF 1846-7,—PREPARED FOR THIS JOURNAL.**

| <i>Name of College.</i>                   | <i>M. D.*</i> | <i>No. Students.</i> | <i>No. Graduates.</i> |
|---|---------------|----------------------|-----------------------|
| Memphis Medical College,.....             | 3             | 55                   |                       |
| Jefferson Medical College,.....           | 64            | 493                  | 181                   |
| Western Reserve Medical College,.....     |               | 216                  |                       |
| Medical College of Ohio,.....             |               | 170                  | 53                    |
| University of Louisville,.....            | 9             | 349                  | 75                    |
| College of Physicians and Surgeons, N. Y. |               | 194                  | 51                    |
| Medical College of Georgia,.....          |               | 106                  | 33                    |
| University of Pennsylvania,.....          |               | 412                  |                       |
| Castleton Medical College,.....           |               | 131                  | 42                    |
| Willoughby Medical College,.....          |               | 101                  | 38                    |
| Geneva Medical College,.....              |               |                      | 43                    |
| Medical College of South Carolina,.....   |               | 203                  | 74                    |
| Franklin Medical College,.....            |               |                      | 5                     |
| Transylvania University,.....             | 10            | 204                  | 64                    |
| University of New York,.....              |               | 410                  | 123                   |
| University of Missouri,.....              |               |                      | 26                    |
| St. Louis University,.....                |               |                      | 13                    |
| Pennsylvania Medical College,....         |               | 95                   | 34                    |
| Baltimore Dental College,.....            |               |                      | 10                    |
| Indiana Medical College,.....             |               | over 100             | 19                    |
| Albany Medical College,.....              |               | 100                  | 30                    |
| Medical Institute of Yale College,.....   |               |                      | 21                    |
| Richmond Medical College,.....            |               | 84                   | 21                    |
| Rush Medical College,.....                |               | 70                   | 16                    |
| Cleveland Medical College,.....           |               | 216                  |                       |

\* Graduates attending the Lectures.

*Prize Essay of the Louisiana Médico-Chirurgical Society.*—At the anniversary meeting of this society held on the first Wednesday of April, it was ascertained that two essays had been received for the prize of one hundred dollars offered for the best essay on *strictures of the urethra*, but neither of them had come to hand within the time prescribed. It was therefore resolved to postpone awarding the prize for twelve months, and to continue the offer to the medical profession at large. Communications must be directed to the President of the Society, and be received by the 1st day of February, 1848. Those now on hand will be retained as competitors, unless otherwise ordered.—[*New Orleans Medical and Surgical Journal.*

*La Lancette Canadienne, Journal Médico-Chirurgical.*—We have just received the 9th No. of this new Journal, published at Montreal, by Dr. J. D. Leprohon. It appears on the 1st and 15th of each month, is issued in newspaper form of six pages, at four dollars per annum, payable invariably in advance. Its motto is, “*One cannot be truly a doctor who has not the disposition always to work.*”—Velpeau. A sentiment well for us lazy Southerners always to remember, especially those who do not write.

We have added the Canadian Lancet to our list of exchanges.



**OBITUARY.**—During the month of May the hand of death has fallen heavily upon the Medical Professors of our country. From the papers of the day, we learn the demise of no less than three in this period of time, viz:

Dr. George McLellan, of Philadelphia, for several years Professor of Surgery in the Jefferson Medical College, and long recognized as a most distinguished Surgeon.

Dr. Augustus Warner, Professor of Surgery in the Medical College located in Richmond, Virginia.

And Dr. John Revere, Professor of the Theory and Practice of Medicine in the University of New York.

**METEOROLOGICAL OBSERVATIONS**, for April, 1847, at Augusta, Ga. Latitude  $33^{\circ} 27'$  north—Longitude  $4^{\circ} 32'$  west Wash. Altitude above tide 152 feet.

| MAR. | Sun Rise. |           | 2, P. M. |           | WIND. | REMARKS.                       |
|------|-----------|-----------|----------|-----------|-------|--------------------------------|
|      | THER.     | BAR.      | THER.    | BAR.      |       |                                |
| 1    | 50        | 29 98-100 | 68       | 29 97-100 | S. E. | Fair. [ing.                    |
| 2    | 55        | " 88-100  | 61       | " 70-100  | S. W. | Cloudy—light shower this morn. |
| 3    | 52        | " 70-100  | 78       | " 71-100  | S. W. | Fair.                          |
| 4    | 59        | " 71-100  | 82       | " 72-100  | S. W. | Cloudy.                        |
| 5    | 62        | " 72-100  | 87       | " 73-100  | S.    | Fair. [noon.                   |
| 6    | 60        | " 80-100  | 81       | " 75-100  | S. W. | Cloudy—light shower in after.  |
| 7    | 56        | " 85-100  | 84       | " 90-100  | S. E. | Fair.                          |
| 8    | 51        | " 88-100  | 84       | " 76-100  | S.    | Fair.                          |
| 9    | 66        | " 72-100  | 84       | " 72-100  | S. W. | Fair—some clouds.              |
| 10   | 58        | " 72-100  | 71       | " 71-100  | W.    | Cloudy.                        |
| 11   | 56        | " 78-100  | 76       | " 84-100  | S.    | Cloudy. [95-100.               |
| 12   | 59        | " 80-100  | 69       | " 61-100  | S.    | Cloudy—blow—rain at 3, P. M.   |
| 13   | 50        | " 76-100  | 80       | " 75-100  | W.    | Fair. [and even'g—rain 95-100. |
| 14   | 53        | " 83-100  | 77       | " 83-100  | N.    | Fair—thund. storm in afternoon |
| 15   | 58        | " 78-100  | 77       | " 56-100  | N.    | Cloudy—storm, rain 60-100.     |
| 16   | 46        | " 89-100  | 61       | " 90-100  | N. W. | Fair,                          |
| 17   | 40        | " 90-100  | 62       | " 90-100  | N. W. | Fair,                          |
| 18   | 48        | " 90-100  | 70       | " 97-100  | N. E. | Fair,                          |
| 19   | 50        | 30 2-100  | 67       | 30 15-100 | S. E. | Fair.                          |
| 20   | 50        | 30 15-100 | 74       | 30 10-100 | S. E. | Fair.                          |
| 21   | 55        | 30 7-100  | 74       | 30 5-100  | S. E. | Cloudy.                        |
| 22   | 60        | 30 5-100  | 77       | 29 97-100 | S. E. | Fair—some clouds.              |
| 23   | 58        | 29 84-100 | 84       | " 75-100  | W.    | Cloudy.                        |
| 24   | 62        | " 77-100  | 69       | " 84-100  | N.    | Cloudy.                        |
| 25   | 50        | 30 5-100  | 68       | 30 4-100  | N. E. | Fair after 12.                 |
| 26   | 46        | 30 2-100  | 73       | 29 92-100 | N. W. | Fair.                          |
| 27   | 47        | 29 81-100 | 80       | " 75-100  | W.    | Fair—breeze.                   |
| 28   | 48        | " 74-100  | 82       | " 75-100  | S. W. | Fair.                          |
| 29   | 54        | " 67-100  | 80       | " 57-100  | S. W. | Cloudy—blow—dusty.             |
| 30   | 60        | " 60-100  | 70       | " 60-100  | W.    | Cloudy.                        |

18 Fair days. Quantity of Rain 1 inch and 90-100. Wind East of N. and S. 8 days. West of do. 15 days.

The month of May has been noted by the most remarkable hail storms ever known to have occurred in this region. Judging from the news-papers, they seemed to have extended over nearly the whole Southern States. The hail fell here during the evening of the 15th, at half-past 8 o'clock, and continued to fall for 20 minutes. Some of the stones were as large as English walnuts. We have seen them reported having measured in other localities 9 and 10 inches in circumference. The crops have been extensively injured by the hail. The month has been very cool for May.

# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—JULY, 1847.

[No. 7.]

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE XXIII.

*The Locality, Climate, and Diseases of East Tennessee.* By  
SAMUEL B. CUNNINGHAM, M. D., of Jonesboro', Tenn.

[NOTE.—In the August No. of this Journal for the past year, (1846,) p. 456, will be found an article having the above title, and written by the same author. The following one is a continuation of the same subject, read, we are informed, by the Corresponding Secretary, (Dr. Frank A. Ramsey,) before the Medical Society of East Tennessee, on the 7th of May, 1847, at Jonesboro', and ordered to be forwarded for publication in this Journal. Our acknowledgments are due this body for selecting our Journal to become the medium of its valuable communications to the profession.—ED.]

At a former meeting of the Society, we endeavored to present a brief view of the climate, locality, and diseases of East Tennessee: proposing at a subsequent time, to speak more at length of their treatment. To effect this object, we have communicated with many gentlemen, for the purpose of ascertaining whether there was any uniform system of practice among us; and whether there was any modification of disease peculiar to the different sections of this State. As the result of our enquiries we find in every county heard from, that fevers compose a large portion of the catalogue of diseases. I will not attempt to discuss the question—what is fever? and whether the division into orders and genera is proper. Classifications have been made, and intelligible terms, marking varieties which we all understand. We shall therefore adopt the old nomenclature.

That form by Cullen called Synochus, or by Smith defined Typhoid, prevails in districts, between water-courses, on the more broken and elevated portions of country; whilst Intermittents and Remittents are generally confined to the streams, with but few cases of primary intermitting typhoid, especially during the prevalence of the former

varieties. Indeed many physicians inform us that they rarely meet with the typhoid form at all; whilst in the periodic varieties, they may have had an extensive practice, and when they do meet with it, it is during the winter season, or at a distance from rivers or other malarial sources. The first variety does not seem to be limited at all by the season, prevailing winter or summer, and is common alike on hills and in valleys. Localities apparently most healthy, often become the seat of this fever.

For upwards of twenty years, we have had frequent opportunities of meeting with it, and observing its phases. Patients generally complain for days, or sometimes for weeks, before the attack, of loss of appetite, headache, listlessness and dullness. Sometimes these symptoms steal on gradually, until the patient goes to bed without any marked chill or fever, or much increase of pulse, or other symptoms which attend the stadium prodromorum of the other fevers. There is merely an increased indisposition, gradually developed, some excitement of pulse, the secretions failing almost unobserved, so that it is difficult to fix any precise period of accession. The appetite and other functions seem to fail *pari passu* with the gradual increment of fever. When these premonitory symptoms are early attended to, the danger is pretty easily averted. A purge or two of calomel, and oil, with light diet and rest; or a few powders, daily, of ipecac. and calomel restore the functions. But when neglected until fever is fully developed the issue is often serious. During the progress there is accelerated pulse from day to day, with very little diurnal remission; towards morning there is generally an alleviation, but not a marked remission of symptoms. The pulse may diminish its number some 5 or 10 beats per minute. Pains in the head and back (especially the latter, which never fails to be present,) are for some days all that is complained of. The heat is but slightly increased, and the sudorous discharge diminished but little. The tongue, too, alters but slowly: at first clammy, then white, next brown or black, then all secretion for a time suspended, and nothing but a fiery redness in the middle, and as clean as if scalded and scraped—dry, chapped and tremulous. Then follows colliquative stools, incoherence of thought, and without a change, the patient is lost. In others, it advances with a fiercer step, yet rarely without predisposing illness, shorter but more impressive, before being seized with rigors. Pains in the back and head become almost excruciating; pulse sometimes corded; hot skin, sometimes perspiring, but which



soon declines into dryness, hard to be overcome. In this variety, pleuritis is a frequent concomitant, or pneumonia, or some other inflammation, which confuses the symptoms, and urges the adoption of active depletion. Bleeding in these cases at the earliest advice after the chill is over, is the hinge upon which reasonable expectation will turn. We bleed in an erect position, if syncope is difficult to effect, to the extent of 16, or 20, or 30 ounces. Then a full dose of calomel, say 20 or 30 grains, followed by 2 gr. doses in continuation with half a gr. ipecac. every two hours, until the bowels act freely. If in eight or ten hours this should not take place, then some other active purgative may be used, with clysters.

After venesection, we give immediate attention to the spinal pain, adopting the view that the nervous system is first in the circle of morbid action, and the cord, the great trunk which supplies its important parts with sensation and motion, cannot suffer long without bad consequences, not only to the nervous system in general, but to all the dependent organs supplied by its branches. It is accordingly examined, fomented with hot mustard water, or poulticed with mustard, or cupped and scarified. Nor will this in the least interfere with or retard internal administrations, but rather favor their action. In all cases too, it is of early consideration with us, to equalize both circulation and temperature. Hot mustard pediluvia are excellent baths for the feet—in it they may be placed for twenty or thirty minutes, to be repeated *pro re nata*. The covering will answer the rest of the indication. Cold water is freely admitted, but only a mouthful or two at a time. The nauseating results of the calomel and ipecac. kept up through the whole day and night, are greatly beneficial. This course, if early pursued, will in a few days greatly mitigate the symptoms, which may induce the use of quinine.

If, however, these have been neglected, the prospect of success is greatly lessened. After the lapse of two or three days, we have rarely witnessed any beneficial results from bleeding; or if temporary advantage is gained, yet there is great danger of an earlier collapse. Abdominal tenderness on pressure, rarely present at the beginning, is a pretty constant symptom after it has advanced but a few days; and it is one of the most difficult to meet of all the attending symptoms. Whatever is the cause of this determination, whether a congestion of the vena portarum and branches, or a more idiopathic-like form of inflammation be established, and the lesion of the glands of Peyer and Brunner the centre of that action, or whatever other

theory may be adopted, of one thing we feel satisfied—that the main hope of cutting off the disease at once, or of arresting its violence, depends upon the vigorous application of active anti-inflammatory treatment during the first day or two. If the period has passed unimproved, cupping and scarrifying may be tried; yet we acknowledge they have not answered our expectations. Active purging, especially if drastic, seems to aggravate the symptoms: the pulse quickens and abdominal tenderness increases. Opiates, and ipecac., and calomel, and blisters, and demulcents answer a better purpose of defence. The blisters should be stripped as much as possible of the cuticle and converted into suppurative surfaces, and if ordinary applications will not prevent healing, new blisters may be raised, and the surfaces washed with a decoction of *phytolacca decandra* or poke root.

We never fail also on a remission, however imperfect, to use the quinine, in doses of one and a half or two or more grains every two hours. When the case is alarming, we have given 5, 10, and even 30 grains at once. The opinion that acids, when in an uncombined state, almost always exercise an irritating influence on inflamed mucous membrane, have induced us to adopt the disulphate, or the common article, without the acid, because, in making the addition, it is rarely found without an excess of the latter, and it has, moreover, appeared to rest easier on the stomach in substance, than when it has been given in solution. We have used it freely in both conditions, and in many cases with marked advantage, but in many others we are bound to declare our total disappointment. In intermittents and remittents, generally, we can attest its utility. We however have met with cases of a synochal variety, where there were chills amounting to severe rigors and shakes, like those of intermittents, occurring irregularly for days, in which the quinine was administered very freely, even until deafness was produced, and dimness of vision, but without arresting the recurrence of the symptoms, and the patients sank in a few days into a fatal collapse. Some cases of apparent rigors seem to be unattended with the sensation of cold at all, and are therefore more properly belonging to neurotic phenomena, to which quinine does not appear to be so applicable as opiates or sedatives. Mercurial action, when mildly induced, has rarely failed of being a good omen; yet there is so much apprehension of intestinal irritation in protracted cases from a continued use of calomel, in any combination, sufficient to overcome febrile lesions, that it has been used with caution: even necessary evacuations are sometimes haz-

ardous, superinducing irritation of the bowels, if not fatal diarrhoea. Too often, we feel compelled to adopt the defensive rather than offensive plan of treatment, and instead of jugulating the disease, to husband the resources of nature whilst we fulfil obvious indications, until the force of the disease is exhausted. As the result of our own experience we must say, that however strong the hope of quinine has been in this form of fever, it has not proved an antidote in our hands, but like calomel, ipecac., opium, the lancet, and many other useful agents, it is only the auxiliary. In these views, we find others, in whose experience great confidence may be placed, strongly coinciding. From answers to interrogatories on these points, we take the liberty of quoting from a few out of the many agreeing substantially in the same things.

The first is from Wm. N. Vance, M. D., of Kingsport, in the vicinity of Holstein river, and in a locality where intermittents and remittents often prevail. He says: "My experience in typhoid fevers, so called, has been quite limited. I have had some cases of that class of fevers, in the treatment of which I have been induced, by inviting circumstances, to try quinine; but I have never been satisfied with its effects. I have no faith in quinine as a febrifuge, except in fevers that observe *well defined* periodical paroxysms, and are at the same time unattended with high inflammatory symptoms. These are conditions scarcely ever found in what is called *Continued* fever. You know that owing to some hidden or mysterious influence, ALL forms of fever, whether idiopathic or symptomatic, observe more or less periods of exacerbation and remission. I have in some instances *imagined* the paroxysms well enough defined to use the anti-periodic, but was soon taught by bad results, that Medicine was not an *exact* science. If bad results were not the direct consequence, I have at any rate observed *no* good to grow from it. The reason why it has done no good in these cases *may* be that there was inflammation. If typhus or typhoid is an *essential* fever, we will, in all cases, I believe, during the progress of disease, meet with secondary lesions which add to the intensity of the symptoms, *and aid in preserving the continued form of the disease*. Or the reason it has done no good in my hands *may* be, that I have not given doses sufficiently large. I have had no experience in storming diseases by the *heroic* doses of quinine used by some of our Southern brethren. The *shock* produced by these doses *might*, in some cases be revulsive, but in many, fatal. So far would I be from using large doses of quinine in typhoid fever,



that (if I could put faith in the motto of Hannemann—'*Similia similibus curantur*,') I would consider infinitesimal doses the very remedy. Pariera, in his *Materia Medica*, says, large doses of disulphate of quinine, produces three classes of effects, viz: 1st, '*Gastro-enteritic irritation*'; 2d, '*Excitement of the vascular system*, and 3d, '*Disorder of the cerebro spinal functions*.' Almost an artificial Typhoid Fever!—an array of morbid phenomena that embraces all the prominent points in that disease. Whilst treating a case of remittent fever last fall, in company with Dr. ———, we had some conversation on the use of quinine in the treatment of fever. His own experience was unfavorable to the use of this article as a therapeutic agent in the treatment of fevers of a continued form. He informed me that those who uniformly gave it were *particularly unfortunate* in that branch of practice. \* \* \* \* With regard to the proportion of typhoid fever to other fevers, I do not know that I can give you any satisfactory information: it certainly must vary very much. A physician practicing in a malarious district must meet with a very small proportion of cases of typhoid fever. In my practice, the proportion of typhoid to intermittent and remittent would not amount to so much as one in twenty. I have no particular plan of treatment for this disease. My object is to avoid danger in whatever direction it may come—looking at the different modes of dying as the great landmarks to guide me in my pathway."

The next I shall quote is a letter from M. R. May, M. D., residing at Athens, in the lower section of E. Tennessee. Athens is situated in the interior, some twenty miles perhaps from the river, in a dry, rolling country.

He writes—"The fevers incident to our locality are of the typhoid tendency: in fact, the disease called typhoid, has prevailed extensively during every season of the year, though principally in the summer and fall. I don't consider that it differs from the common continued fever, so far as its pathology is concerned; neither do I think that the intermittent and remittent fevers differ pathologically from continued."

He then speaks of the views of different authors on the pathology of fevers, and believes them similar. He says, "I also consider intermittents and remittents and typhoid, to be similar in pathology, from the fact of their often running into each other. I am at this time attending a case which was purely typhoid, '*ab initio*,' which terminated in intermittent. If typhoid fever is dependent upon dothineri-

tis, why do we have remittent periods more distinct than occurs in any other disease purely inflammatory?"

After discussing the doctrine of their essential sameness, he speaks of the treatment. "I bleed," says he, "when the pulse will justify. In some cases, where the constitution is good, and the patient has not been confined too long, I bleed regardless of the condition of the pulse. I can judge after a few ounces have been abstracted, whether it is proper or improper, and act accordingly. I use quinine freely during the remittent period, for several reasons: 1st, to brace up the vascular system, through the nervous, to prevent venous congestion. 2dly, to enable the patient to convalesce more rapidly, after the disease has been subdued. If the liver is torpid I combine calomel. I am not one of those who consider the medical virtues of quinine to depend upon its sedative properties. It is strange that quinine should be recommended to prevent collapses, or even when the patient is extremely prostrated, by those who contend for its sedation. Who ever heard of an intelligent physician warding off prostration by administering sedatives? I believe nearly every physician of note recommends quinine under such circumstances. There is great dissimilarity of opinion about the proper dose of quinine. I generally give 5 gr. doses every two hours, during the remittal period, until 15 or 20 grains have been administered, and I have no disposition to enlarge the dose, for it seems to have the desired effect. In fact, I have succeeded in anticipating a paroxysm with much smaller doses in some constitutions. At certain stages of the disease, I have observed that the administration of quinine produced considerable constitutional irritation, manifested by delirium, jactitation, &c., conditions that could hardly be produced by sedatives. Under certain circumstances it has a tendency to equalize the circulation—to convert an irritated and quick pulse, into a full and soft one. From this I suppose some are lead to view it a sedative. Every observing physician has seen the same result brought about by the administration of stimulants under certain circumstances."

J. G. M. Ramsey, M. D., a physician of extensive experience and observation, and member of our Society, occupies a river location, and in a region where intermittents and remittents greatly preponderate. He writes—"I have never seen, since I left the Marine Hospital, at Charleston, genuine Typhus. Typhoid disease—or at least a typhoid tendency frequently characterizes our autumnal and vernal affections—especially those of the eruption kind." These, of course,

are not the typhoid, or simple continued fevers, of nosological writers, nor the same kind that prevail in sporadic cases throughout East Tennessee, at any or all seasons of the year. He adds, "The typhus, so called by many practitioners, is only a form of disease induced by the depletory system of treatment carried to excess," &c. He, however, does not describe at all the typhoid of the upper or interior country. With regard to quinine, he barely remarks, "I consider it only an anti-periodic and tonic, and not at all of any value in its febrifuge properties otherwise."

Another very respectable practitioner, Dr. Carriger, of Tazwell, says, in his response, with regard to quinine, "I have used quinine during the fever, and have found but little benefit from it, so long as the skin remained permanently dry and hot, accompanied with a dry, red tongue; but whenever a complete remission takes place, or the skin becomes moist and soft, and the tongue loses its redness and dryness, and thirst is less urgent, I have administered the quinine with the happiest effects. The form I usually give it in, is the following, viz. from 3 to 5 grs. quinine with half a gr. to 1 gr. ipecac., combined, or if the cerebral condition does not forbid, with from 5 to 8 grs. Dover's powder, every two hours, always keeping in view the effects of the first dose, and the condition of the important organs." These are compounds, it may be observed, at war with the opinion of the action of quinine being a sedative, but compatible with the opposite notion of its powers: at all events, they are intended to obviate undue stimulation. He goes on to say—"The principal fevers I have met with, are remittents and intermittents, and few sporadic cases of scarlatina." He then details his treatment, which would extend this article to an undue length. The result of his views is, that quinine could not properly be used until a decided remission should occur.

With these quotations, sustained by the opinions of many others of the profession expressed in private conversation, we feel justified in the following conclusions:—

1st. That whether any essential difference exists in the several classes of fever, or whether they are only modifications of a diseased action, developing a class of symptoms which, when taken collectively, we call fever, is not at this time our object to decide. That known as simple continued or typhoid, is the form usually prevailing in the more elevated and usually healthy localities, where the intermittents and remittents are rarely found; and on rivers and large creeks, intermittents and remittents prevail to the almost entire absence of the former variety.



2dly. That these fevers differ in character, if not in essence, in several material points—for example: they differ in the producing cause, which cannot be the same in all localities and seasons, and in their periods and remissions—in their treatment, especially under the action of the article, quinine, which will scarcely ever effect the jugulation of the typhoid as it will the two other varieties.

3dly. It is the prevailing experience of physicians throughout East Tennessee, that in none of the three varieties is the practice considered proper, of giving quinine until there is some remission—unless, indeed, it be in cases of imminent congestion, and where exhaustion is rapidly advancing.

4thly. The opinion is general, that it possesses tonic and stimulant powers, and is approved of as such, and not on the principles of sedation.

5thly. That in doses of from 5 to 10 grains, repeated every two hours during the period of remission, we gain the most satisfactory results of the medicine.

6thly. That quinine, in typhoid, should be held subject to, and used under the same kind of restriction as we would feel bound to do in its use in other inflammatory diseases.

Before closing this article, embracing the prevailing diseases of East Tennessee, many of which we cannot even touch upon at present; yet there are some which occupy a pretty prominent place in our catalogue, and to which we must give a passing notice.

Rheumatism, both acute and chronic, and Dysentery, are distressing accompaniments—the former occurs in the winter and spring seasons, and the latter in our autumnal months. The Scarlet fever, for the first time, made its appearance in the year 1831–2. It commenced its frightful ravages in the mountains of the upper counties, extending towards the vallies, sometimes sweeping off half a family or more, within a few days. In its attacks it was principally confined to children. Persons apparently in good health, were prostrated within a few hours: many died in from eight to twelve hours after the first symptoms appeared. The powers seemed overwhelmed, as by paralysis, producing all the symptoms of a hopeless congestion. It extended through the winter, and spring ensuing, mitigating in violence and intensity, until it disappeared, having borne off some hundred trophies. We then heard but little of it until the winter of '43, when, as in '31, it commenced its career in precisely the same mountainous region, and in the same neighborhood, but became much more extensive, and involved a wider field. It was computed that

some hundreds fell victims to its fury that year in Washington county; and scarcely had its characteristic features disappeared, until a malignant erysipelas followed it, attacking and carrying off adults with alarming rapidity. Bleeding, in both these epidemics, was considered by many, one of our cardinal remedies; but where it was most fatal, reaction never sufficiently developed itself to justify the use of the lancet, or if development of arterial action did afterwards take place, it was, nevertheless, too imperfect to hope any thing from its use. It was oftentimes met, in mild cases, by some supposed successful remedy, destined, however, to disappoint the next individual, perhaps, who might be prompted to its use. The light of science sheds but a flickering ray on the practitioner's path. The fact was, in mild cases it passed through whole families, sometimes attended with as little danger as the measles, and scarcely requiring any active treatment at all; whilst with their neighbors it was the opprobrium medicorum of every treatment. Since that period we may hear every year of some cases, in particular neighborhoods, though of a much milder type.

I will here give one more extract, whilst on this disease, from Dr. Vance's letter, on the treatment of the epidemic erysipelas which followed scarlatina, as it prevailed in the neighborhood of Kingsport, in 1845.

"In the treatment of Erysipelatous fever, which visited our neighborhood last winter, I relied on quinine almost entirely, and was richly rewarded by the happy results that followed its use in *every case*. The attending fever was typhoid, according to the literal sense of the term, accompanied in the earlier part of the disease with well marked adynamic symptoms. Here I used it to *support* the system, not as a febrifuge. After evacuating the bowels by means of mild cathartics, (generally calomel 8 or 10 grains, followed by oil,) I put my patients on the use of small doses of quinine, REGULARLY ADMINISTERED, together with *something* of a *nourishing* diet, (broths mostly); towards the latter stage of *protracted* cases, I brought in wine to the assistance of the quinine. By this treatment, *expression* was given to the countenance, *force* and *fullness* to the pulse, and a healthy feeling of *warmth* diffused throughout the extreme parts of the body. After the first two or three days the bowels were opened by enemas. I used spts. nitre, dulc., in company with quinine in some cases; also eupatorium infusion, where there was a pulmonary indication. All I have to say in praise of the plan is this: My

---

patients (between 35 and 40) *all got well*—many of them suffering much from the ravages of the *local* disease.”

This account of Dr. Vance is certainly interesting and flattering. No treatment has hitherto afforded results so flattering, and as to the correctness of his statements I entertain not a particle of doubt; yet we think that, had the same treatment been pursued in this place, (Jonesboro’,) in the spring of ’44, when the disease first made its appearance in Tennessee, the results would have been less favorable. The quinine *was* used both by myself and others, and according to my own recollection, in some cases freely, without such marked effects. In the writer’s *own case* it was given, and he distinctly remembers that the impression made upon his feelings at the time, was, that it was too *stimulating*,—increasing and diffusing heat and excitement, and but a few doses were taken. His attending physicians, however, who ought to have been the *better judges* of its effects, were pleased with it, believing it had done good. In a number of cases, before being confined ourselves, and in fact in almost all, we bled freely at the early stages, and with relief in some most marked. In our *own*, under the most violent cephalalgia, blood was drawn in an erect posture ad syncope; and the change from extreme of suffering to perfect relief was instantaneous—the transition was like magic. The pain and fever, however, returned, *less violent*, the succeeding night, and we repeated the bleeding, but the good effects were not at all so clear as at first, though some relief was gained. In several instances, where the strength of constitution was good, and reaction strong, nothing affords equal relief to cold water freely applied to the head and face. Discrimination of course was important in its application. When the powers were weak, or the disease recedent, or the disease of the adynamic tendency from the first, mischief might have followed its use, and in those kind of cases perhaps nothing would have so well fulfilled the indication as quinine, wine, &c. In most cases, where cold water was resorted to, it was eagerly kept up by the patient himself—it acted the part of a succedaneum to his feelings, soothing him to rest; that he was unwilling afterwards to relinquish it until the urgent symptoms had subsided. With us the inflammatory type prevailed, but frequently congestive. But few cases of well marked congestion ever recovered. Is it a fact, that all epidemics are most violent at their first outbreacking, and afterwards degenerate into a milder form?—Such would seem to be the case from observation with us. Perhaps it may be owing to constitu-



tional changes, adapting the system better to sustain the shock. But we hasten to a conclusion, almost conscious of the trespass we have committed upon the patience of the Society. In conclusion, let us urge upon each other the importance of a closer and more minute observation of facts for ourselves. Books are composed from facts, or assumed facts. We have no oracles like those of Delphi to consult. Books may give us great doctrines or principles founded on the observations of others. But Science is progressive. Let onward, onward, be our motto; and let us all first *merit*, and then *demand* the *respect* due to the *merit* of our profession.

---

ARTICLE XXIV.

*Malignancy.* By WESLEY C. NORWOOD, M. D., of Cokesberry, Abbeville District, South Carolina.

So far as my limited reading has extended, there appears to be nothing definite, published by any author, on the malignancy of disease. Certainly it is, a very important niche that should be filled up. I know of no subject that has not been specially investigated of more importance to the medical profession, and none by which a monographical writer could more probably distinguish himself, *mesmerism not excepted*. All men of talents cannot become authors. Many have not the time and others have not the inclination. But surely some of our most eminent physicians should not permit the medical public to be longer ignorant of this important condition of disease. There are so many terms used to mark this feature of disease that it rather adds to the confusion and makes darkness visible. Putrid is a term often used to denote *malignancy*. Now every professional man of reading and experience knows that putrid diseases are often manageable, and much under the control of medicinal agents particularly if we include the synochus of Cullen, and other authors; if so, is it not an appropriate term. Nervous is used for the same purpose, and with as little propriety. As an illustration on the one hand we may take jail fever, (typhus carcerum) which is extremely mortal or malignant, and on the other hand influenza (catarrhus epidemicus) of some seasons when it is almost universal and at the same time requires no other treatment but rest, pediluvia and diaphoretics. Typhus is frequently used to express the same, but many of the diseases ranged under the head typhus, are putrid or nervous, and under many circumstances are readily managed with

almost any treatment short of poisoning or killing, consequently this is not sufficiently definite. But in the present day, *congestion* is the term principally laid hold on to distinguish *malignancy*, but certainly the most exceptionable, inapplicable and indefinite term made use of to point out this condition of disease: We have in fearful array, *congestive, intermittent, remittent* and *continued fever, congestive pneumonitis, &c., &c.* The fact is, disease depends on irregular, unequal, and morbid action of the functions or organs of the system; and whenever this disordered, unequal and irregular action exists, it matters not how or by what produced, we find the fluids unduly accumulated in certain organs. If so, the organs receiving more than their due proportion must be *congested*. *Congestion*, perhaps, is always an *effect* on *incident*, and never a *primary* affection. This being the view taken, it should be cast out as improper and unsuitable. If *congestion* were the *cause*, or the *main circumstance* that required *attention* in the *treatment* of disease, it would be obvious to every one, if we could empty the vessels engorged, it would cure the disease. But all know how little it would avail to unload the vessels of accumulated blood, and nothing more. It would advance the cure about as much as emptying the bladder in diabetes.

The irregular distribution of the fluids depends upon a pathological condition of the system, and that state or condition must be changed and overcome before we can restore health to the body. If disease depended on entony or atony alone, Brown with his lancet and bottle of brandy, would have stopped the progress of disease of every kind, and death long since would have starved for want of victims. It is common to speak of the danger of *congestion in vital organs*. It is often the very salvation of the patient. In the common affection of fainting, if the fluids were to remain in the capillaries and superficial vessels, there would be few, and perhaps no cases of recovery; all are well acquainted with the course pursued in such cases. Notwithstanding the superficial vessels are empty, and the surface pale, and the blood thrown upon the internal and vital organs, yet we wish to increase the fulness of the already loaded organs, by laying the patient prostrate, to counteract even the effects of gravitation. It is not a deficiency in the supply of blood, but it is the peculiar condition of the brain and nervous system which is the cause of the syncope. Let a person unaccustomed to witnessing capital operations, be suddenly and unexpectedly brought into the place where such an operation is being performed, he grows pale and faints.

Certainly *congestion* is not the cause, but the impression made on the brain, through the organ of vision. The brain receives the shock, and requires more blood to restore itself, and the treatment is in perfect accordance. In syncope, it may be doubted whether the brain has a less quantity or supply of blood than before the occurrence. It is true there is a general pallor of the surface, and from the erect position the inference would be there was a deficit in the supply of blood to the brain. As just observed above, perhaps it is not so. If we reflect but a moment, we find the brain is entirely surrounded by a bony paries and perfectly excluded from the influence of atmospheric pressure. This being true, whatever diminishes the strength of heart's action will necessarily increase the quantity of blood in those organs offering the least resistance to that action, and lessen it in the organs offering most resistance to it. The brain offers least resistance to the admission of blood. So that *congestion* in the above condition, is increased as a restorative measure. If *congestion constitutes malignancy*, it would be very unphilosophical and dangerous to rely on its increase for safety in any case whatever. Any person being skeptical in regard to atmospheric pressure, illustrated in the history of those who have ascended the highest mountains, where the pressure of the air was so light that the blood was ready to issue from the pores of the skin, or they can have a very familiar example in the application of a cupping glass and exhausting it of air. I think it is Pringle, who mentions the fact, by bleeding an animal, slowly and gradually, to death, and afterwards examining the brain, a person would be led to the conclusion that it died of engorgement, or *congestion* of the vessels of the brain. Showing how little resistance the blood meets with and with what facility it is sent to the brain. I venture the assertion, that before the examination was made from the gradually weakened action of the heart from the drain of the vital fluid, it was not even dreamed of finding the blood accumulated in any other organs than the heart and the large blood-vessels in its immediate vicinity. Those who believe the heart to be overwhelmed by blood in syncope would find themselves quite as much mistaken; showing that there is no diminution in the quantity of blood, but that the condition of the brain and nervous system is such as to require more blood to resist the shock and to sustain their action, than when every organ is healthy and their action normal.

In putrid and nervous fevers, I allude to the *malignant*, or what is styled *congestion*; if the blood was to remain in the capillaries and



superficial vessels, and the condition of the brain and nervous system should not be changed, *death* would be the *result in every instance*. This assertion is fully sustained by the most violent and rapidly mortal disease ever known in the United states. I allude to the spotted fever of the North (typhus gravior), in many cases of which there was a perfect suffusion, engorgement or stagnation of blood, in the capillaries of the surface. All cases in which the above condition predominated, died. Further, I believe, in the cases in which the vital organs are *congested*, that the safety or life of the patient depends upon this *dreaded congestion* of these organs, and the belief is based upon the fact that the condition of the organs engorged requires more blood for their support and existence, and that Providence in his wisdom has so arranged the system, that when any injury of moment is received, that the blood immediately rushes to the parts injured, or to those organs which are essential to the development of nutrition, motion and intellect, or in other words, are essential to life. The question might be asked, if *congestion* is a beneficial occurrence in disease, why not increase it? I have just stated that nature has made ample provision on this head, and that the quiet and recumbent position of the patient comes to her aid. I would further in reply, say, sleep is beneficial or necessary to preserve the health and vigor of the system; but no man in his senses would think of sleeping his life-time.

One word while on the subject of sleep—the object of which no doubt is to restore the exhaustion of the system; for which restoration we find the blood accumulated in greater quantity in the brain and other vital organs. If a large amount of blood is necessary to restore the organs to their accustomed strength and vigor, when exhausted or wearied by study, exercise or labor, there is an admirable arrangement of nature to accomplish this end, by darkness and the removal of every stimulus that would be a hindrance to the comfort, and the facility that the recumbent posture affords for its consummation is another fact to be considered. How much more urgent will the demand be when the system is suddenly overwhelmed or exhausted by the poisonous shock of disease or agents creating disease. Nature, the *vis medicatrix*, or instinct, if you prefer, performs the part assigned her, by supplying an abundance of blood to the organs essential to life, and the part the physician has to act when these momentous cases occur, is to change and modify the condition of the system, and then the necessity for this vast accumulation and con-

centration of the vital fluid will no longer exist. But some doubt, and deny that the blood is thrown in a larger quantity on the vital organs during sleep, and base their position on the fact that sweating is more profuse during sleep than when awake, which they consider to depend on increased action in the circulation. The very want of action to a certain degree is the cause of the perspiration, the insensible becoming sensible, or, in other words, the vapour becoming water, owing to the temperature of the surface of the body becoming lower when sleeping. Diseases that often terminate fatally, are not by any means necessarily *malignant*. *Malignant* cases are never protracted, under ordinary treatment; obstinate and severe cases are. *Malignant diseases never require reducing and antiphlogistic treatment*; in fact, they will not *tolerate* it; obstinate and severe diseases may. In putrid and nervous disease, under these titles I include intermittent, remittent, and continued fever, when of these types, also, all of the pneumonitides, when of the putrid or nervous type, or what is generally understood by Pneumonitis Typhoides. In any of the above diseases, severe pain in an extremity or some unimportant part of the system, without redness, swelling or tenderness, constitutes great *malignancy*, not congestion. Sometimes a patient will be attacked in these cases with what is termed the ear-ache; but on inspecting the organ, we find neither swelling, redness or tenderness on pressure; the patient dies certainly, from the first to the third and seventh day. In such cases, it is thought that inflammation has extended to the brain and is the immediate cause of death; but the brain is as free from inflammation as the ear. As we have more apparent symptoms of malignancy in the pneumonitides of the typhoid type, I shall mention them as occurring under this head, with this explanation, that whenever they occur in any other disease, they indicate an equal degree of *malignancy*.

Mr. C. was attacked with violent pain in his knee, and died within twenty-four hours. Mr. R., was attacked with violent pain in a tooth: the tooth was extracted, which was as efficacious as amputating the glans-penis for stone in the bladder; he died in seventy-two hours. Mrs. B., was attacked with pain in the cheek, which finally extended to the eye; she died in seventy-two hours: there was a peculiarity in this case—after the pain subsided, the palpebræ, upper and lower swelled and became red, but there was no redness of the eye. Mr. W., was attacked with slight delirium; there were no other symptoms sufficiently urgent to confine him to bed; he denied

being sick, and yet died on the seventh day from the first attack, and the third after confinement to bed: in this case, the delirium appearing in the forming stage and there being no other symptom of urgency, constituted the whole *malignancy*.

The above symptoms, perhaps, invariably indicate a mortal issue. A pulse, the beat of which is peculiarly short and quick, and at the same time weak, indicates *malignancy*. It is frequently the only symptom indicative of danger in nervous fever, the overlooking of which is frequently attended with fatal consequences, particularly if the patient should be treated with drastic emetics and cathartics, or the usual antiphlogistics. It is often mistaken for that peculiar condition of the pulse, when the system is being brought under the influence of a mercurial action. A thin, saffron colored fluid expectorated in great quantity and with little effort; an expectoration of a thin, sanieous fluid, resembling brine; also a short catch of the breath, producing about as much effort or agitation as a quarter of a hiccough, are all symptoms of extreme *malignancy*, not congestion, and the issue will be fatal. The catch of the breath alluded to, is not of that kind produced from pain in the pleura, lungs, or diaphragm, but exists after all pain has ceased. There is a yellow, tough matter, somewhat resembling melted sulphur, and expectorated with great difficulty, in which the disease is obstinate and the patient sometimes dies; but it is very different from the yellow watery serum, or whatever else it may be, of which I speak; the yellow and sanious fluids appear to be crude and undigested. A negro woman died, who complained of nothing but a pain in a finger—the proprietor, with some of his neighbors, thought she was poisoned. Why a pain in an eye, tooth, finger, knee, or toe, should constitute *malignancy*, I know not. Some consider the symptoms of *malignancy* as a part of the disease; some of them may be, but many of them are not.

How symptoms that are not necessary to diagnosis, or the nosological place and character, should be part of the disease under whose dynasty they may appear, I am not for the present prepared to explain; however, be this as it may, if extreme tenderness, redness, suppuration, ulceration and gangrene, or mortification took place, from the violence of the symptoms, and in the parts so occupied by pain, we might have probable grounds for assigning the cause of death to many of the above peculiarities, in the location of pain. One fact worthy of particular notice is, that none of the symptoms mentioned are essential or peculiar to the disease, delirium and the



fluid expectorated perhaps excepted. Severity and obstinacy depend on the urgency of the symptoms peculiar to the disease; *malignancy* on symptoms not *essential* nor *necessary*. Symptoms peculiar to the latter stages of disease, appearing early or in the first stage, constitute malignancy, in proportion to their number and severity. In this case the symptoms peculiar to the disease show it to be *malignant*, merely by appearing out of their regular order of appearance. A peculiar susceptibility of the system to the impression of remedial agents, irrespective of temperament or the common state of susceptibility; for example, when any mild emetic or cathartic, in small doses, will operate harshly and drastically. When one or two operations produce an unusual degree of exhaustion, and not witnessed under ordinary circumstances, by an indefinite number of discharges from the intestinal canal, and the almost utter impossibility of restraining the disposition to run down by copious colliquative discharges; where astringents produce no sensible effects, and the various preparations of *Papaver* produce narcosis, in small doses, without restraining the exhausting discharges brought on by a single mild cathartic, clearly point out *malignancy* surely not *congestion*.

There is a set of cases of an opposite character of extreme torpor, where emetics, cathartics and venesection are used unsparingly. Where there is very little exhaustion, the torpor may be broken up by such treatment, and the patient recover. But if there is much exhaustion accompanying the torpor, the patient dies suddenly, before it is broken up, or immediately after the torpor yields. We frequently hear of persons dying before medicine can be made to operate; or when it begins there is no restraining the emesis or catharsis. So that extreme torpor with exhaustion on the one hand, or extreme susceptibility with exhaustion on the other, at the outset, equally denote *malignancy*, and not *congestion*, by any means. It may not be out of place, to notice a set of cases which are frequently termed *malignant*. They are cases of torpor without exhaustion, and are accompanied with stupor, coma, and insensibility. These are cases in which nothing short of poisoning will kill, and are the cases we frequently meet with on record; where immense quantities of blood had been taken, without much present detriment to the system and with very little or no impression on the disease. These are the cases which are said to bear bleeding well; truly said; for I am no way certain, if such treatment was pursued, in an entonic, sthenic or phlogistic disease, but that it would be attended with serious conse-

---

quences, if it did not kill. I suppose they may be styled, Armstrong's cases of venous *congestion*; if I mistake not the term in which he bled without apparent injury, in contradistinction from the cases in which he found bleeding to be attended with immediate death. In the one set of cases, the disease was principally confined to the sanguineous system, and connected with torpor of the brain and nervous system; and in the other, exhaustion accompanied. Without some such explanation, we could never account for the quantity of the vital fluid that may be wasted in the one set, without any immediate apparent injury to the system, and the mischief and sudden death from bleeding in the opposite set of cases. This will in a measure account for the clashing testimony of physicians of integrity; one set using venesection as the sheet-anchor in *congestion*, and the other class rejecting it as an unsafe and deadly remedy; it further shows the unfitness of the term, to denote *malignancy*.

The principle feature in all cases of Malignancy, is exhaustion in the energies of the vital organs. The brain and nervous system suffer most; the circulating system frequently. While on the subject of torpor and exhaustion, I will notice a set of cases called malignant, in which the circulating system is disturbed and there is torpor in the brain and nervous functions, as indicated by coma, lethargy, and insensibility; in periodical diseases, where large quantities of blood are taken, and the system suffers but little present injury, when followed by large and repeated doses of the Di Sulphate of Quinine. Notwithstanding the vast quantity of the vital fluid taken, how is it that the coma, insensibility, &c., is never, or but very partially relieved, until the period for the usual termination of the paroxysm arrives? How is it that such cases recover, where venesection is omitted? One item further in these cases of so-called *Malignant Intermittent*. The first ounce of Quinine ever imported into the United States, was by a particular friend. A medical student had intermittent fever, gradually growing worse; about the third or fourth paroxysm, he became comatosed and insensible; his room-mate grew alarmed at the great severity of the symptoms, and called in medical aid. The whole treatment consisted in pressing open his under jaw and giving twenty grains of Quinine. He had no return of the paroxysms and took but the one single twenty grain dose. I could specify numerous cases of Intermittent Fever, in which coma and insensibility occurred; also cases accompanied with convulsions, the breathing stertorous—cases in which it was impossible to introduce medicine,

without first pressing open the under jaw, and then exciting deglutition, by pressing a spoon-handle on the side of the tongue—all of which cases were treated successfully by large and repeated doses of Quinine, assisted by Morphine, or papaver in some form, and epispastics or sinapisms to the spine. Many or most cases of reputed inflammation of the stomach, are nothing more than cases of extreme irritability, accompanied with nausea, emesis or catharsis, and nervous tenderness of the muscles of the abdomen, or epigastric region. I have attended on Mrs. P., for more than ten years, during which period of time, she has had repeated attacks of Intermittent Fever, accompanied with violent emesis and a rejection of almost every thing swallowed; with a tongue perfectly dry and red, excessive thirst, tenderness of the epigastrium on the slightest pressure, difficulty of breathing, and the most intense restlessness and jactitation, and frequently with a violent pain in the stomach. The only treatment adopted to subdue the above symptoms, is a drachm of Quinine in the twenty-four hours, in the worst attack, and a sufficient dose of Morphine to subdue the morbid irritability, the pain and restlessness. I might have given the symptoms more in detail, but all are conversant with the condition of patients laboring under an attack of *Malignant Intermittent*. I omit bleeding; because I do not consider it indicated in perhaps a single case of pure and genuine *Malignant Intermittent*. Who would ever think of bleeding, in cases of great exhaustion of the vital organs? Who would think of abstracting from twenty to sixty ounces of the vital fluid, let what incidental symptom occur that might, where all the energies of the brain and nervous system were laboring under the most intense pain, irritability and exhaustion, with any other prospect than killing his patient. *Malignant diseases* do not belong to the catalogue of maladies that are even palliated by great losses of blood, much less relieved. Such treatment is *invariably fatal*. By dispensing with it, a great many of the evils consequent on excessive bleeding, are avoided, (and I must be permitted to say, that from twenty to sixty ounces is excessive.) For example, dropsy, obesity, paralysis, dyspepsia, mania, delirium tremens, &c., &c.

One word on contra-indications in *malignant Intermittent*, where inflammation, as gastritis, enteritis, splenitis, hepatitis, or phrenitis supervenes and observes its periodicity. I much doubt whether such cases ever occur. That organs of such vital importance as some of them are, should have excessive paroxysms again I cannot



believe. But as this is a point I do not intend to moot, I will just say, if such cases should occur, I believe the indications would be fully met by quinine, morphine, epispastics, and perhaps calomel. I believe it to be unphilosophical and not true in fact, that quinine and venesection are indicated at the same time, in any case of Intermittent whatever, during the stage of reaction or exhaustion; or that any *symptoms*, or *set of symptoms*, could arise where the *primary affection required quinine*, and the *incident required bleeding and antiphlogistics*. It would be folly to study and make ourselves acquainted with the pulse, type, stage and diathesis, if such were the fact. The general condition of the system can never be altered, while laboring under disease, by the local affection of any organ supervening. According to all medical philosophy, the local affection would partake of the general condition. The general condition of the system being *caumatoid*, the local inflammation could never be *atonoid*. The general condition being *atonoid*, the local could never be *caumatoid*. Diseases of Atony, are as acute as diseases of Entony; the most rapidly fatal disease we are acquainted with belong to the asthenic diathesis; if rapidly fatal, surely acute. Pneumonitis Typhoides frequently terminates in forty-eight hours, and who would consider it less acute or the inflammation less active than Pneumonitis caumatoides, that rarely terminates any way until about the seventh day? There may be cases in which the incidents occur that would bear bleeding, and where any strong impression of a reducing nature would relieve the urgency of the symptoms, where the disease was not truly *malignant*. But such can never be asserted where pure *malignancy* exists; the chief feature of which being an exhaustion of the vital energies of the brain and nervous system, would never tolerate reduction and antiphlogistics. I will mention one or two symptoms of *Malignancy*, belonging to Cholera Infantum: Thrusting the fingers into the mouth and fauces. Certainly putting the fingers into the mouth and fauces cannot be a part of the disease. The above is certainly a fatal symptom. Another is an effort between gaping or gasping and retching, or rather an opening of the mouth, as if going to retch. This also is a sure harbinger of a mortal issue.

In conclusion, I have extended my remarks much beyond what I intended. My intention was not to criticise any man's opinions or practice, but merely to call attention to the circumstance of disease with which their remarks are headed, and the unfitness of any other terms made use of to express it, and to elicit light from some physician of eminence who may be disposed to handle it with a systematic and masterly hand.

*Monthly Report of the Sick and Wounded, 2d Division of the Army in Mexico, commanded by Maj. Gen. Z. TAYLOR, U. S. A., under charge of Assistant Surgeon C. M. HITCHCOCK, M. D., Medical Director. For the Month of February, 1847.*

\* No report, but supposed to be about 50 and 20.  
NOTE.—This is now known not to be correct. The Kentucky Regiments lost very heavily—more than double the numbers above mentioned. P. F. F.

## REMARKS ON THE PRECEDING REPORT BY PAUL F. EVE, M. D.

Of the several monthly reports of the army in Mexico under Gen'l Wool, to whose corps or column our friend, Dr. Hitchcock of the U. S. army, was first attached, and which he left with us to use as we thought proper, the one embracing the battle of Buena Vista, it is supposed, would most interest our readers. This, it will be recollected, was commenced on the 22d of February, and terminated by the repulse of the Mexicans the next day late in the afternoon. The number of combatants, on that severely contested field, could not have been less than 25,000. Santa Anna, in his summons to Gen'l Taylor to surrender at discretion, admitted his force to be 20,000. The deserter from the Mexican troops, during the night of the 22d, stated their number to be 15,000 infantry and 6,000 cavalry. Gen'l Wool says they numbered 22,000. It has been estimated as high as 24,000. In Gen'l Taylor's official despatch to government, he makes his whole force at Buena Vista to have been short of 5,400—deduct the reserve at head-quarters, to protect the camp equipage, ammunition, &c., and we have 4,820—according to Gen'l Wool, only 4,610, the exact number of the actual participants, in this dreadful engagement which resulted in so glorious a triumph to the American arms.

The loss sustained by the Mexicans in this battle, and during their retreat, will probably never be correctly reported. From 1500 to 2,000 were left dead or wounded on the field, 294 prisoners were taken, and before reaching San Louis de Potosi, there is good reason to believe that more than one half of that immense army had disbanded. Gen'l Taylor reports 292 killed, 481 wounded, and 26 missing—making a total loss of 799 Americans.

It will be perceived, by reference to the table on the opposite page, that Dr. Hitchcock puts down only about 300 wounded; but to account for the difference between this number and that contained in the official despatch of the commanding General, it must be borne in mind that from two regiments no return had been made to the Medical Director of the Division; and then again, that wounds of a trivial nature may have been dressed on the field of battle during the engagement, the men resuming their places in the ranks.

We find the following memorandum made by the Doctor on the 24th February, 1847: "Number of wounded brought from the battle field of Buena Vista, 263—slightly wounded, 121—severely ditto, 138—mortally ditto, 4. Many others were injured, but required no



dressing, such as slight contusions, &c., &c." I presume these were all transported to Saltillo.

It is well known that this battle was fought chiefly by volunteers, and that two or three regiments greatly distinguished themselves. Among the number of which honorable mention has been made, were the two from Illinois, the 1st commanded by the lamented Col. Hardin, who fell at its head; and the 2d by Col. Bissell. I am permitted to present our readers with a full report of the 2d regiment, made by its surgeon, Dr. Ed. B. Price, and dated March 1st, 1847.

#### MEAN STRENGTH.

| Month.    | Officers. | Enlisted Men. | Total. |
|-----------|-----------|---------------|--------|
| February. | 39        | 771           | 810    |

*Report of Wounded dressed on the field, during the action of the 23d, and sent to General Hospital same night, by order of Maj. Gen. Taylor, without a formal report.*

| Companies.                | RANK.     |              |            |          |          | Total. |
|---------------------------|-----------|--------------|------------|----------|----------|--------|
|                           | Captains. | Lieutenants. | Sergeants. | Corp'ls. | Privates |        |
| A.                        | 1         |              | 1          | 1        | 14       | 17     |
| B.                        |           |              |            |          | 3        | 3      |
| C.                        | 1         |              | 2          |          | 12       | 15     |
| E.                        |           | 1            |            |          | 7        | 8      |
| G.                        |           |              |            |          | 1        | 1      |
| H.                        |           | 1            |            |          | 10       | 11     |
| I.                        |           |              | 1          |          | 8        | 9      |
| K.                        |           | 1            |            |          | 7        | 8      |
| 1 Texian.                 | 1         |              |            |          | 1        | 2      |
|                           | 3         | 3            | 4          | 1        | 63       | 74     |
| Adjutant of the Regiment, |           |              |            |          |          | 1      |
| Total.                    |           |              |            |          |          | 75     |

It will thus be seen that 75 were alone wounded in this regiment, besides the killed of which no return is here made. Companies D and F. were, I think, sent to Saltillo, under Maj. Warren, to defend that post, and from the mean strength (810,) we are also to deduct the sick, &c.

Of the renowned Mississippi Regiment, under Col. Davis, it is reported that originally it was composed of over 900 men. In an attack upon one of the forts of Monterey, the order given was countermanded, but being unheard or unheeded by 15 men, they continued the assault, when 13 of their number were killed, one was shot through the thigh and borne off by the 15th man, who alone escaped. By the combats at this city and other casualties, and by the selection of two of its companies to guard the Head-quarters of Gen'l Taylor, this regiment entered the battle of Buena Vista with only 341 men and officers. Of this small number 41 were killed and 58 wounded,

total 99—making nearly a third of the whole, either killed or wounded. Gen'l Wool, in his official report, says this regiment alone, with one howitzer, boldly charged some 4,000 of the enemy, and checked their march upon Saltillo. And yet this same regiment escorted Gen'l Taylor to and from Saltillo, during the nights of the 21st and 22d, which he visited twice during the fight to secure that important post.

In this same battle the Kentucky regiment of infantry, commanded by Col. McKee, lost 45 killed and 57 wounded, total 102; including nearly all its officers.

There were no less than 64 commissioned officers killed and wounded at Buena Vista—viz: 3 Colonels, 1 Lieut. Colonel, 9 Captains, 14 Lieutenants, killed—total 27. 1 Brigadier-General, 1 Colonel, 1 Major, 9 Captains, 29 Lieutenants, wounded—total 37.\*

But independent of the Mexicans, our soldiers have had to encounter a far more dreaded and more universal enemy in the diseases of the climate and camp-life. If some have been slain in battle, a greater proportion have died from internal maladies. The first regiment from Tennessee, under Col. Campbell, when they passed a year ago through New Orleans, numbered about 900 men. On their return home a few days ago, only 350 remained in it to be mustered out of the service. They were, however, at the taking of Monterey, but disease had far more to do in thinning their ranks than the cannon or the sword. From the Georgia regiment no report has been received, but I learn the companies from the mountainous regions of the State were the greatest sufferers. Our own company, the Richmond Blues, stood the campaign comparatively well, 52 passed

---

\* It is proper to state that the wounded, and even the few prisoners made, were most barbarously treated by the Mexicans. No doubt many a gallant man might have been saved, or his life prolonged, by proper treatment, after he fell on that bloody field. The American army had unfortunately just been paid off a few days before it occurred, and some of the officers had many hundred dollars about their persons. The bit of the bridle of Col. Yell's horse broke, and he was carried headlong into the enemy's ranks, where, instead of being made prisoner, he was most brutally murdered. Col. McKee and Lieut. Col. Clay both fell at the head of the brave Kentucky infantry, and when last seen were using their pistols and swords against those who were stabbing them to death. Col. Hardin, with his own sword, had cut the lance in twain that had been thrust through his body. A witness says he saw a mutilated American begging on his knees for life, while he was butchered by surrounding Mexicans. The dead were even stripped; and the prisoners taken by the Mexicans were, in the emphatic language of Santa Anna, *all dead* but four!

through it and were honorably discharged at New Orleans. Some, however, like those who returned from Florida a few years ago, under similar circumstances, present, besides the bronzed face, marks of great internal derangement of the system.

A detail of the principal wounds and their subsequent treatment would have added value to this report, still we hope the facts will not be devoid of interest to our readers. And while on the subject of military surgery, we may venture the surprise, why it is that Surgeons and Assistant Surgeons hold no rank in the United States Army? In Europe, if we mistake not, the Surgeon ranks as Major, and his title is Surgeon-Major to such a regiment. During a recent conflict in Africa, we learn from a Medical Journal of Paris, that after all the staff-officers of a French regiment were shot down, the Surgeon claimed his place in the line, and led on the men to battle and victory. That wise and patriotic King of France, Louis Philip, rewarded him for his conduct with the cross of honor. During the battle of Buena Vista, the Medical Director of Gen. Taylor's Division, Dr. Hitchcock, not only discharged his duties as Surgeon, but acted as aid-de-camp to the commander-in-chief. We wait his promotion by the President for gallant and efficient services.

---

ARTICLE XXVI.

*Case of Rupture of the Fibro-cartilage and ligaments between the 3d and 4th cervical Vertebrae, with Paralysis of all the depending portions of the Body.* By E. M. PENDLETON, M. D., of Sparta, Georgia.

Lucy, a negress, belonging to Rev. W. J. Sasnett, about 60 years old, and very corpulent, had a fall from a cart on the 20th March, the occiput striking the ground first, which brought her chin forcibly upon her breast, with the weight of her whole body. She was brought immediately to Sparta, a distance of six miles, and I saw her about two hours after the accident. She was incapable of motion, except with the muscles of the head and neck, and insensible to stimuli throughout nearly the whole system. As an evidence of the complete loss of sensibility, the nurse applied a hot iron to her hand, which she could not feel, and it burned her so severely, as to produce a deep eschar. Her mind was very clear, and she gave a lucid account of the accident from beginning to end. She said the cart was



going at a brisk rate, and ran over a stump, whereupon she lost her balance, and was precipitated on her head. The moment she struck the ground, she felt as if her head was severed from the body, a complete numbness shot through her whole system, like the sensation produced by retarded circulation. She often expressed herself as having no body, nor arms, nor legs. There was however a slight degree of sensibility in the stomach and abdominal viscera, produced no doubt by the pneumogastric nerves given off above the seat of injury, and by the great sympathetic nerve. Her respiration was slow and labored, as though a few muscles had to do the work proper to many. She complained of severe pain at the nape of the neck, about the 3d and 4th cervical vertebæ: all above was natural—all below was dead. The course of the pectoralis major muscle might be traced with a pin: the muscle having sensation—the surrounding integuments none. This was repeatedly tested.

There was complete paralysis, with, however, retention of urine, and rendered the daily use of the catheter necessary, with the exception of the few last days, when the sphincter relaxed and the urine was passed incontinently. She had an operation on the fourth day after the injury, (the first and last,) as the result of a full dose of oil and copious glysters. Her pulse was very little accelerated during the whole course of the treatment, and, if any thing, was feebler and slower than natural, particularly towards the termination of the case. The few last days she appeared to be in a great deal of pain where she could feel pain, and vomited large quantities of bilious matter from the stomach, which was so irritable as to prevent the retention of any thing taken *per orem*. She succumbed on the morning of the tenth day, retaining her mental faculties almost entire to the last.

About six hours after death I examined her, assisted by Drs. Connel and Powell. We confined our observations to the seat of the injury, as we had been so instructed. Upon making the first incision the blood streamed out, as might have been expected from a living person, and there was considerable warmth throughout the system, as though she had just died. We removed nearly all the cervical vertebæ, together with the medulla spinalis. There was also considerable extravasated blood exterior to the vertebral column. The meninges of the cord exhibited strong marks of inflammation, and their veins were greatly distended with blood. The cord itself had undergone the change of suppuration, and pus oozed out in considerable amount by incisions made in it.

The impression was manifest to all, that there was a rupture of the fibro-cartilage between the 3d and 4th cervical vertebrae. When we first removed the muscles and exposed the vertebral column, Dr. Connell took hold of the spinous processes approximating each other and pulled them in opposite directions, passing up and down the exposed vertebrae. When he came to the 3d and 4th, he found that there was a considerable yielding, which all of us tested, as did students Ryan and Green, so much in fact as astonished every one. Some five or six of the vertebrae were removed, and then it was evident that these vertebrae were only united by some of the external muscles that yet adhered to them. The bodies of the bones themselves were as essentially torn asunder, and the cartilage ruptured, as could possibly have been done by the hand. I do not remember that any of the processes were fractured; on the contrary I think we examined every one carefully, and found them sound. There was, however, I think, a rupture of the capsules of the oblique articular processes, and the ligaments of the spinous processes were either ruptured or greatly extended. On cutting loose the muscles which held the 3d and 4th vertebrae together, a space opened of its own accord, and we could perceive over the face of each of them the prominences and indentations occasioned by the ruptured cartilage adhering more to one side than the other. We merely inferred that a partial or perhaps complete luxation existed from the bones having been so violently separated, as it could not be determined from a post mortem examination, owing to the flexible or movable state of the parts after death. In connection with this, it may be proper to state that during life, at one period, in attempting to turn her over to relieve her position, a peculiar sound, like the slipping of one bone over another, was heard to proceed from her neck, both by myself and the attendants.

I deem this case interesting, simply from its being of rare occurrence, as it is not probable that much light can be thrown upon the treatment so as to render even alleviation practicable. The autopsic observations exhibited exactly what I expected to find, and confirmed the diagnosis and the practice pursued in the case. The remedies used were simply palliative, with the exception of the strychnine, which was given several days, as a forlorn hope, simply to be doing something. The patient was kept in one position as much as possible, counter-irritants freely used over the spine, particularly to the injured portion, and warm stimulating frictions over the

extremities. The only wonder is that she lived so long with such a complete paralysis of the nerves both of motion and sensation, and those too which were so essential to the vital functions of digestion and respiration.

---

ARTICLE XXVII.

*Case of Tape-worm over thirty-six feet in length, expelled from a child aged 4 years.* By JOHN D. TWIGGS, Student of Medicine, of Augusta, Ga.

In drawing comparisons of the length this species of worm (the *Tænia solium*) sometimes attains, I find by consulting authorities, that in the 17th century it is said to have far exceeded those observed at the present day. The case about to be related is a fair specimen as regards the size of the worm, and is not one of common occurrence, it may, from these circumstances, not be devoid of interest.

The mother of this child, a negro on a neighboring plantation, had noticed his vitiated and irregular appetite, and gradual emaciation for some weeks, when a dose of a domestic remedy for worms, the decoction of the China (*Smilax China*) root was given, and revealed the cause. This medicine was continued for five weeks, during which time he passed several portions of tape-worm, measuring from six inches to three feet. His appetite at times it would seem impossible to satisfy, and his whole desire was for more food. His medicine was now changed, and a dose of oil and turpentine substituted in its place. In a few hours he passed, at one evacuation, *thirty-three feet* of tape-worm, besides several smaller pieces. Since then his appetite has not been so great, and his hunger easily appeased. Now, if we consider the length of time the child had been passing pieces of worm, though in smaller quantities than at the last stool, the entire length must have been very great, if the *Tænia solium* is always solitary as its name indicates, and no more than one worm existed in the intestines of this child. Dr. Tyson, in the *Philosophical Transactions*, No. 146, remarks that the *Tænia* is always single, being sometimes as long, and sometimes exceeding the length of all the intestines. But this is contradicted by Dr. Good, who says, the records of medicine prove that the several varieties of worms have been voided simultaneously by the same patient. In the *Cyclopædia of Practical Medicine* I find it stated, that the length which the *Tænia* is capable



of attaining, is very considerable, though quite indefinite: those passed now-a-days rarely much exceed twenty feet. A case is recorded by Olaus Borrichus, (Rees' Cyclopædia, vol 36,) of one eight hundred feet long, voided in a year's time. If the pieces passed by the child mentioned in the case above, belonged to several worms, the part, or say even the whole worm voided at the last evacuation is a thing now of rare occurrence, since they seldom exceed twenty feet, and this was at least thirty-six or forty feet long.

---

## PART II.—REVIEWS AND EXTRACTS.

*Propositions on the "Fallacies of Physical Diagnosis in Diseases of the Chest."*—By THOMAS ADDISON, M. D. Critically Examined by ROBERT L. MACDONNELL, M. D., Lecturer on the Institutes of Medicine, McGill College, Physician to the Montreal General Hospital, Consulting Physician, Montreal Eye Institution.—[British American Jour. of Med. and Physical Sciences.]

In the last number of "Ranking's Half-Yearly Abstract," the reader will find a series of propositions from the pen of Dr. Addison, Physician to Guy's Hospital, London, purporting to point out numerous errors in diagnosis, which those who practice auscultation and percussion are liable to commit, if too exclusive reliance be placed on physical signs.

We do not deny, that the science of auscultation is imperfect, but we do maintain, that without its assistance, we cannot have accuracy in diagnosis, and consequently success in the treatment of thoracic diseases. We have always insisted upon the necessity of comparing the general symptoms, the history of the case, and the mode of succession of the physical phenomena, with the signs actually existing, as indispensable to accuracy of diagnosis, and in this, we have but followed the example of the many distinguished writers who have devoted attention to this subject.

But in reading the aphorisms of Dr. Addison, one would suppose that auscultators invariably made a diagnosis from physical signs *alone*, and not from a comparison and combination of these signs, with every other particular, capable of elucidating the nature of the malady. Auscultators do not make a diagnosis because they *hear* certain abnormal sounds, but because they *reason* on the physical changes which have produced these sounds. If an observer be perfectly ignorant of the necessity of studying the modifications and combinations of physical signs; the importance of comparing the sounds heard in diseased parts, with those produced in a healthy or less diseased portion of the lung; the value to be attached to a par-

ticular sound occurring at a certain stage of the disease; and, above all, if he be as ignorant of pathology as Dr. Addison takes it for granted that auscultators usually are, then, but only then, are the alleged errors he has pointed out likely to be made.

In the observations we are about to offer, we feel it our duty to expose the many fallacies put forward by Dr. A., and in doing so we shall follow him through each proposition, and as briefly as possible, rely to his alleged objections to physical diagnosis. We would, however, observe, *in limine*, that Dr. A. commences with objections to the stethoscope, as if auscultators never employed percussion; and he then objects to percussion, as if those who practice it, never use the stethoscope. His object is but too apparent. He has proposed to himself the task of underrating the stethoscope, and, where the attempt can be made, he neglects not the opportunity—seemingly not aware, that in his efforts, he displays remarkable ignorance of the actual state of our knowledge as regards physical diagnosis. The truth of what we now state, we hope to be able, satisfactorily to prove, and we at once proceed to our task.

A few of the propositions have been so glaringly absurd, that Dr. Ranking has himself pointed out their refutation. We regret he did not criticise more closely the remaining ones; for doubtless, many an inexperienced physician has already been deceived by Dr. A.'s plausible sophistry.

1. It is well known that many persons while under examination entirely fail to perform the respiratory act efficiently, either from nervousness, or from mistaking the manner of accomplishing it. This may lead to an erroneous belief, that the respiratory murmur is deficient, or even absent, while the lungs are perfectly healthy.

This source of fallacy is avoided, says Dr. Ranking, by desiring the patient to cough, and to inspire deeply, so as to cough a second time. This done on both sides of the chest, the actual state of either lung may be ascertained with tolerable precision.

It could hardly have occurred to any writer, except one whose object was to undervalue the stethoscope to urge such an objection. It is, in fact, tantamount to this, that an objection to the use of the stethoscope consists in the *necessity of learning* how to employ it; for if this preliminary step be taken, the above objection falls to the ground.

2. Whatever lessens the freedom, mobility, or elasticity of the ribs, renders the sound on percussion more dull. Hence it is that in rickety persons, where deformity of the chest has taken place subsequent to birth, the signs furnished by percussion are often extremely unsatisfactory; and, indeed, under such circumstances, neither percussion, nor in many instances auscultation, can be much relied upon.

Admitting the truth of this proposition, the rarity of the cases to which it applies, weakens its value; and, besides, the same alteration of the chest affects not only the physical signs, but also the *general*

*symptoms* of thoracic disease; for in such cases we have difficulty of breathing, cough, palpitations, and congestion of the lips and extremities, owing to the embarrassment to the circulation through the heart and lungs resulting from the malformation.

3. Some persons with actual deformity have naturally such fixedness of the ribs, that they at all times manifest very imperfect resonance, as well as considerable feebleness of the respiratory murmur.

The remarks upon the second proposition apply equally to this one.

4. The rigidity of the cartilages of the ribs in advanced life has a similar effect; and, moreover, often tends to throw obscurity over hypertrophy of the heart, by preventing the usual heaving of the ribs at each systole of the hypertrophied organ.

The answer to this is easily given, by proposing two questions—Is heaving of the ribs truly pathognomonic of hypertrophy of the heart? Have we not more unequivocal signs of this lesion? If so, we can dispense with one of questionable value.

Had Dr. Addison consulted a small work on auscultation, written by one of his colleagues, he would have found the following passage, showing the importance which auscultators attach to mere impulse, as a sign of hypertrophy:

“But does—the student may inquire—a powerful impulse necessarily indicate hypertrophy? No! Is, then, hypertrophy always accompanied with a strong impulse? Assuredly it is not. In explanation of the negative to the former questions, it may be stated that an aneurism of the descending, or even of the left side of the ascending aorta, may push the heart aside, and by dilating and producing partial absorption of the parieties, may communicate a powerful heaving impulse to the part in which the natural impulse is felt.

“In explanation of the negative to the second question, it may be observed, that though the heart be powerful, and the parieties of the ventricles very thick and strong indeed, the action of the heart may be so hampered by the consequence of obstruction in the valves, and its contractions may be so impeded, and so overpowered by fluid accumulation either within or without its cavities, as to be almost entirely mastered, and to be only just enabled to flutter a little, and thus to rid itself of its load. Such, indeed, is very commonly the condition of the organ in long standing diseases, of the valves, and particularly in that of the mitral valve, when the nervous energy of the individual is considerably reduced; even though the muscular power of the heart, abstractedly considered, be much greater than in health.

“Such is commonly the condition of the impulse in the last days of the life of persons affected with disease of the valves, accompanied with hypertrophy. If they do not die suddenly, as persons so affected frequently do, it may indeed be considered to be the natural termination of such cases.



---

"A very large and powerful heart, therefore, may be accompanied by a very feeble, irregular, and fluttering impulse; and a very small and feeble heart may be, and usually is, accompanied with a very smart and 'smacking' one."—*A Clinical Introduction to the Practice of Auscultation*; by H. M. HUGHES, M. D., p. 198.

5. When exploring the chest in a case of recent disease, we may be misled by the permanent effect of an ancient pleurisy.

No one in the habit of making examinations of the chest, and familiar with the pathological changes resulting from ancient pleurisy, can be easily deceived by the phenomena alluded to.

6. When, as usually happens, rickety deformity of the chest consists in lateral flattening of the ribs, with projection of the sternum, the action of the heart is liable to beat with such violence, and over so diffused a space, as to lead to the unfounded apprehension of organic disease of the organ.

True; but in such cases the diagnosis can generally be made from the presence or absence of more unequivocal signs of organic disease. Dr. A. seems to attach by far too much importance to increased action, as pathognomonic of organic cardiac disease—a mistake exceedingly general.

7. The dullness on percussion, caused by pushing up of the diaphragm by an enlarged liver, or fluid in the peritoneum, is liable to be mistaken for dullness caused by fluid in the pleura.

Such a mistake can only be made by an examiner who has paid but little attention to the progress of our knowledge on this subject. The diagnosis between these affections was clearly pointed out by Dr. Stokes many years ago, and has been so lucidly explained by subsequent writers, that it is very unlikely that, with ordinary care, such a mistake can be made. In any case, the objection only applies to the right side of the chest.

8. Bronchitis is a frequent source of fallacy, it may greatly obscure pneumonia, phthisis, and pleurisy, as well as other chronic diseases of the organs.

Every pathologist is aware of this; yet we do not recollect having, in our (by no means limited) experience, found any difficulty in diagnosis from this cause. On the contrary, the existence of bronchitic râles have, in more instances than one, greatly assisted in establishing the diagnosis, as, for instance, in cancer of the lung, emphysema, &c. We have no hesitation in stating that an experienced auscultator will suffer but little annoyance from this alledged source of fallacy.

9. When the bronchitic complication of phthisis is considerable, we often fail to detect some or all of the physical signs of the latter, such as dulness on percussion, tubular respiration, and even bronch-

ophony and pectoriloquy. This is more especially the case in the earlier stages.

Dr. Addison seems to forget that a bronchitic râle, *accompanied by dullness*, is one of the most valuable signs of the first stage of pulmonary consumption. This was shown many years ago by Dr. Stokes, and it has more recently been insisted upon by Mons. Louis. In another place we have stated that "A bronchitic râle, confined to the upper lobe of one or both lungs, resisting treatment, and accompanied or followed by dullness, at first slight, but gradually increasing, is as valuable a physical sign of phthisis as any we possess." So far, then, from bronchitic râle obscuring the signs of phthisis, it is, on the contrary, one of the most valuable indications of the early stages of that disease, particularly if occurring at the apices of the lungs. Moreover, it is not easy to understand how a bronchitic râle, produced by the passage of air through diseased bronchial tubes, can mask dullness on percussion. But even supposing it capable of doing so, could not percussion be practised whilst the patient is made to keep in his breath. Dr. Addison states that his proposition applies particularly to the earlier stages of phthisis; but surely he does not consider tubular respiration, bronchophony, and pectoriloquy, characteristic signs of the earlier stages. The first two are never heard in the earliest stage, and the latter is never heard but in the last stage; consequently a bronchitic râle cannot be considered as a fallacious sign, but one of extreme value in the earliest stage of phthisis—the only period in which our efforts to arrest the disease, are likely to be attended with success.

10. Dullness of sound on percussion, tubular respiration, bronchophony, pectoriloquy, and gurgling, are not necessarily conclusive of phthisis. All these signs may result from changes induced by a former pleurisy, from pleuro-pneumonia, or whooping cough, or even from recent pneumonia or pleurisy associated with considerable bronchitis.

The diagnosis is not so difficult as seems implied in the above statement. When pectoriloquy and gurgling are heard in pleuritic effusions, they are accompanied with other unequivocal signs of that affection, as for instance, dilatation of the side, protrusion of intercostal spaces, displacement of the heart or liver, loss of vocal vibration, &c., and they indicate the removal of the fluid of an empyema, through a perforation in the lungs, and consequently are attended by signs of this communication, such as "spalshing," metallic tinkling, amphoric cough, and pneumo-thorax. The possibility of confounding cases of phthisis, in which the physical signs alluded to, are presented, with pleuro-pneumonia, we do not deny, if no attention be paid to the history of the case, the rapidity of progress, and the presence or absence of other signs of phthisis.

We have never heard dullness of sound on percussion, tubular respiration, bronchophony, pectoriloquy, and gurgling in whooping

cough; and, until we saw the present proposition, were always under the impression that the last mentioned disease was remarkable for the absence of physical signs. A view in which, we believe, almost all observers coincide.

11. When, in phthisis, the larynx is so involved as to impede the entrance of air, and give rise to permanent sonorous râle in the tube, the reverberation of this râle through the entire chest is apt to lead to the erroneous suspicion of disease in the lungs.

This statement is open to two objections. In the first place, if the disease in the larynx have advanced so far as to impede the entrance of air, the quantity of air thus admitted is not likely to cause much reverberation. Secondly, Dr. Addison must be aware that in phthisis the laryngeal symptoms rarely set in till towards the close of the disease, when, of course, no embarrassment in diagnosis can arise from the occurrence of râle. He must also be aware, that even supposing his statements true, (which we are far from allowing), the occurrence of such a complication must be so rare, that none but a prejudiced writer would urge such an objection to physical diagnosis.

12. Complete loss of voice from the larynx almost completely nullifies the results of auscultation.

When loss of voice occurs as a complication of thoracic disease, the latter has always preceded the former. We know of no case where aphonia has obscured the diagnosis, but we know of many where it is of the greatest service in assisting us to form a correct one.

In any case, loss of voice can only affect the *vocal* auscultatory signs, and these are so perfectly valueless, *taken by themselves*, that the auscultator can, without disadvantage, dispense with them. We know of no signs which so constantly mislead the inexperienced, as the different modifications of the voice. A slight resonance, so common in women and young men, with shrill voices, is constantly put down as pectoriloquy and bronchophony. It is now generally admitted that Laennec attached too much importance to these signs. We wonder that Dr. A. did not at once discard them as useless complications.

13. The existence of a cavity may be overlooked if the bronchial tubes leading into it are plugged with mucus.

In every case of suspected phthisis, says Dr. Ranking, the patient should be made to breathe and cough with violence; this will dislodge mucosities and render the existence of a cavity perceptible.

Has Dr. A. ever known a mistake made under the above circumstance? It seems to us that the merest tyro would have desired his patient to cough—a simple and ready method of dislodging the plug of mucus, the cause of so much confusion.

This fallacy seems to have suggested itself to the Doctor at his desk, and not at the bedside.



14. A patient may have all the rational signs of incipient phthisis, while auscultation does not reveal any change in the lungs.

Similar symptoms may arise from relaxed uvula, and in hysteria.

In a note appended to an essay on empyema, published four years ago, we stated—

“I am not ignorant of the fact, that in some rare cases of phthisis, the constitutional symptoms may continue for a long time before the slightest traces of the physical phenomena of the disease become manifest, owing, most probably, to the morbid processes being confined to the central parts of the lung. I have now seen many such cases, and have observed in some of them *a peculiarly fetid odour from the breath, after coughing, and from the expectoration.* The diagnosis, in these obscure cases, rests upon the want of correspondence between the presence of all the symptoms of phthisis and the total absence of the physical phenomena. We are not, however, in such cases, left long in doubt, for very soon the lesion becomes discoverable by auscultation and percussion.”—*Dublin Med. Jour.*

We do not contend with Dr. A. for the originality of the proposition; but though we have, even more fully than he, stated our experience of these cases, we never fancied that because they form a *rare exception*, he or any one else should have considered them as invalidating the *rule*.

15. Dilated bronchial tubes surrounded by indurated pulmonary tissues, cannot be distinguished from phthisical lesion by auscultation alone, especially if situated in the apices of the lungs.

In such cases the diagnosis is chiefly formed by the history of the case.

It is true, that a careless or inexperienced auscultator may not be able to make the diagnosis, for there are many signs common to the two affections. In both, we may have dullness on percussion, pectoriloquy, gurgling, and absence of respiratory murmur; but in dilated bronchial tubes, *there is a want of accordance between those signs and the general symptoms.* There is no hectic emaciation, or rapid sinking, as in phthisis. Moreover, the history of the case shows us clearly that its slow progress is not reconcileable with our notions of the course of phthisis; and this view is still further strengthened by the fact, that in dilated tubes the *physical phenomena remain unchanged for years, whereas, in phthisis, their mutations are rapid and progressive.* There are other points of dissimilarity, but enough has been stated to prove that, with ordinary care, the “fallacy” alluded to, may be avoided.

16. Malignant disease of the lungs cannot be distinguished from other lesions by auscultation alone.

True; but does Dr. A. pretend that the diagnosis can be made *without* auscultation? If so, he is highly culpable for keeping his professional brethren ignorant of this important fact. It is certainly

quite true, that we cannot rely solely upon physical signs for a diagnosis of malignant disease of the thoracic viscera. But has any writer on the subject maintained that *they alone* are sufficient for that purpose? Do the observations of Stokes, Walshe, Taylor, or Graves, assert the affirmative of the proposition? Certainly not; they, and all subsequent observers, have insisted on the necessity of connecting the general symptoms with the physical phenomena, and thence deducing a diagnosis. It had been more wise had Dr. A. waited until auscultators *had asserted* what he has undertaken to *disprove*.

17. If acute pneumonia have proceeded to complete hepatization when we first examine the patient, the physical signs are frequently insufficient to distinguish it from tubercular consolidation or ancient pulmonic induration. This is especially the case if the apex of the lung be the seat of the induration.

That it is extremely difficult, indeed we may say impossible, to distinguish complete hepatization when we *first* examine the patient, from tubercular consolidation or ancient pulmonic induration, we freely admit. But we would ask, does Dr. A., or any other physician of equal experience, always make a diagnosis on the first examination of his patient, without inquiring into the origin, mode of succession, and modification of the symptoms and physical signs.

If we neglect to inquire into these particulars, and rely on physical signs alone, we shall not be able, from their assistance, to make an accurate diagnosis; but if we recollect that pure pneumonic consolidation is by no means frequent at the *apex of the lung*, and that "ancient pulmonic induration," or, in other words, "*carnification*" of the lung is a condition of the organ very rarely observed, and *par consequence*, still more rarely met with at the apex of the lung, it must be admitted that the value of proposition, No. 17, is very questionable.

18. Pneumonia may occur without cough, and so closely resemble simple continued fever that both the stethoscopist and the non-stethoscopist are apt to be deceived.

Of all cases in which the stethoscope has been employed, its vast utility has not been more indisputably proved, than in the very instances alluded to by Dr. A., namely, *latent pneumonia*; in such a case we unhesitatingly assert that *without the stethoscope* a correct diagnosis *cannot be made*; and if the disease has been overlooked by Dr. A., or any physician, it is because auscultation has not been employed. The reader will observe, that Dr. A. started with showing how the use of physical signs may mislead the practitioner; in the above proposition, he inadvertently points out how we may be deceived by not employing them. He has, unintentionally, proved a little too much.

19. When the anterior and inferior portions of the left lung is consolidated by pneumonia, it may not be detected by percussion on

account of the proximity of a flatulent stomach. Under similar circumstances a marked amphoric respiration is produced, with metallic tinkling, leading to the erroneous conclusion, that pneumo-thorax is present.

We may here observe that solidification of the anterior and inferior portions of the lung is not very common; indeed, we doubt much if Dr. A. has met with many examples of it.

Be that as it may, we would ask Dr. A. has he known the mistake alluded to, to have been frequently made?—or has he not more generally remarked, that even inexperienced auscultators recognize the source whence the amphoric sound proceeds. Under such circumstances we have frequently made the patient swallow a few drops of water, in order to instruct a class in the detection of these sources of fallacy; the water dropping into the flatulent stomach produces a sound closely resembling metallic tinkling; but we do not recollect to have heard metallic tinkling spontaneously produced in these cases, as seems implied in Dr. A.'s remarks.

In any case, a few drachms of any carminative mixture, by expelling, or displacing the flatus, will remove the source of error.

20. It cannot be determined by physical examination whether pneumonia have or have not supervened upon tubercles, although the prognosis in the two cases would be very different.

With due deference, we do not see how the prognosis can be much affected in the manner alluded to by Dr. A. For if we are satisfied that phthisis is *unquestionably* established, the supervention of pneumonia can only affect the prognosis, as far as the probable *duration* of life is concerned, it does not render the disease more fatal, though it no doubt shortens the duration of the sufferer's existence.

21. I doubt whether physical examination can in any instance determine with certainty, the existence of simple tubercles in the lungs.

We do not purpose trying to convince Dr. A.; we would, however, advise him to apply himself to this branch of auscultation; and as he appears to be far behind the age, we recommend to him the manual published by Dr. Hughes, his colleague.

22. When serous effusion is very considerable, giving rise to unequivocal bronchophony, tubular respiration, and want of resonance and vocal vibration, physical examination has repeatedly led to a mistaken belief that these signs resulted from pneumonic or other consolidation of the lung.

Setting aside altogether the fact that when serous effusion advances to the extent alluded to by Dr. A., it generally produces a displacement of the heart, to the right side, when the effusion is situated on the left side of the chest, and a displacement downwards of the liver, when the effusion occurs on the right side: it must not be forgotten, that enlargement of the side and bulging out of the intercostal



spaces, signs so characteristic of extensive serous effusion, are never noticed in pneumonia; but as they occur in some cases of cancer of the lung, the diagnosis might be rendered obscure. As I have already drawn the attention of the profession to the points which will enable them to form a correct diagnosis in such cases, I shall content myself by merely alluding to those observation. A consolidation of the lung from pneumonia never yields *absolute dullness* on percussion, and as this sign attends all cases of pleuritic effusion of any extent, it alone would serve to distinguish the one from the other.

Besides, in extensive pleuritic effusion, there is complete absence of tussive and vocal vibration over the affected part, signs which are never absent in pneumonia.

23. When a patient presents himself with febrile affection of any kind, we may, on examination, detect dullness on percussion, tubular respiration, bronchophony, and a *râle* not distinguishable from the submucous crepitation commonly observed in pneumonic hepatization; and yet physical examination should not enable us to determine whether the chest affection be recent or of ancient date. When a portion of lung has been compressed by pleuritic effusion, and has been prevented from expanding again by adhesions, the physical signs may remain permanently, and be found to resemble precisely those which result from recent pleuro-pneumonia.

We are sorry to appear so captious, but we really cannot allow another gross blunder to pass unnoticed. Firstly, we maintain that submucous crepitation is *not* heard in *hépatization* of the lung, but *after* the hepatization has commenced to pass into the stage of resolution. Secondly, "when a portion of the lung has been compressed by pleuritic effusion, and *has been prevented from expanding again by adhesions*—a process of contraction commences in the parietes of the affected side, which quickly and very perceptibly produces a flattening of the chest, corresponding to the seat of the disease, accompanied, moreover, by depression of the shoulders, and tilting outwards of the angle of the scapula.—Has Dr. A. ever seen such consequences follow recent pneumonia? or is *he* in the habit of making a diagnosis without inquiring into the history of the case? If so, we wonder not at his alluding to sources of fallacy, which we venture to say, no auscultator but himself ever encountered. We are not surprised, that if Dr. A. attach but a little importance to the pathology of thoracic disease, and to the order of succession, combinations and modifications of physical science as it appears he does, that he should have derived but little assistance from the stethoscope.

24. Experience leads me to the conclusion, that pleuritic friction-sound cannot in all cases be distinguished from the rubbing produced between the inflamed peritoneal surfaces of the liver and diaphragm; neither can the croaking sounds produced in the bronchi be always distinguished from the pleuritic rub.

Admitting the probability of the error alluded to, in the first part

of the above sentence, (although it has never occurred to us to meet with friction-sound, arising from the rubbing of the inflamed peritoneal surfaces of the liver on the diaphragm, except when the liver presented tumors on its surface,) yet it can only occur on the right side. Sometimes there is, no doubt, difficulty in discriminating between the rubbing sounds and those generated in the bronchial tubes, yet the accompanying symptoms and the history of the case will always enable us to distinguish the one from the other.

25. A simple pericarditis is rarely attended with pain, and as the other symptoms of that disease are equivocal, the physical signs are chiefly to be relied upon in forming a diagnosis. Nevertheless, when effusion has taken place to a certain amount, the friction-sound commonly disappears, and auscultation fails to recognize the disease.

If friction-sound has been heard in a case of pericarditis, and has suddenly disappeared, the change indicates, either a return to a perfectly healthy condition, adhesion of the opposed surfaces of the membrane, or effusion of serum into its cavity. If the first or second of these changes has taken place, the sound on percussion over the heart will present its usual character; but in the latter case, the loss of friction-sound is followed by *extensive, complete, and absolute* dullness all over the cardiac region, and even beyond it. Being aware of these facts, we are not likely to be misled by the disappearance of the rubbing sounds.

26. Enormous accumulations of fluid in the pericardium, cannot always be distinguished from effusion into the cavity of the pleura.

Here is another great error.

Has Dr. Addison ever tried the diagnostic test of Laennec for effusions into the pleura, viz: the changing of the position of the patient? If so, how can he suppose that we are to accede to the foregoing proposition. Effusion into the pericardium *cannot be displaced* by the position of the patient, but that which is produced by the pleuritic inflammation readily changes its position, if that of the patient be changed. Moreover, as before stated, extensive effusion into the left pleura commonly produces dislocation of the heart to the right side. Has Dr. A. ever known this phenomenon produced by effusion into the pericardium? We answer no! Again, effusions of great extent into either pleura are usually attended with dilatation of the *side*—protrusion of the intercostal spaces, œdema of the integuments (frequently) and loss of vocal and tussive vibration—signs which are not noticed in pericarditis with effusion.

27. When the pericardial friction-sound is single, auscultation may fail to distinguish it from a valvular murmur, especially if it be situated over the region of the valves.

To the young stethoscopist this difficulty might present itself, but the history of the case, the long existence of cardiac disease, the absence of febrile symptoms and of pain over the cardiac region, &c.,

would point out the difference between an old and recent attack of the heart. Surely Dr. A. does not mean to assert that it is common to find valvular murmur as rough as friction-sound, and still remain single! But even so, there are many distinguishing marks between them. Valvular murmur, when single, is always situated over one or other set of valves, strictly accompanies the first sound, is not influenced by position or by pressure of the thoracic walls against the heart, conveys to the ear the idea of being generated deep in the substance of the heart, and is not removed or modified quickly by treatment—in all these particulars a strong contrast exists between the two sets of sounds; moreover, friction sound is superficial, and is increased by making the patient lean forward, (*i. e.*, if no effusion have already taken place into the sac,) so as to bring the opposed surfaces of serous membrane into close contact, whereas valvular murmur remains unaffected by these manœuvres.

28. The double pericardial friction-sound may be confounded with the see-saw murmur of imperfect aortic valves, and vice versa.

The diagnosis of the disease of the aortic valves does not rest solely on the see-saw sound—nor has any auscultator asserted that it did. Besides that sound, we look for the bruit de soufflet in all the arteries of the upper extremities, that sound proceeding from the aorta to the smaller branches: the visible pulsation of the vessels of the neck and arm, and the jerking pulse at the wrist, or as Dr. Hope termed it, the “pulse of unfilled arteries.” We have also combined with these, evidence of hypertrophy of the heart in many cases. Moreover, the see-saw sounds are most intense over the aortic valves, whilst those from pericarditis are most intense corresponding to the junction of the auricles with the ventricles. It will be noticed, that Dr. A. again assumes what we have so frequently contended against, that auscultators rely solely on physical signs, for he must be aware, that the history of the case, will, in many instances, afford assistance in our diagnosis.

29. A sound closely resembling a murmur appears sometimes to be produced by the stroke of the heart against a portion of lung interposed between it and the parietes of the chest. Under such circumstances, auscultation may lead to the erroneous conclusion, that the heart is diseased.

As we have never heard this sound, we make no remarks on the above proposition.

30. Auscultation fails to distinguish an aortic murmur depending on organic change from one which results from other causes; neither can it decide whether what has been called a mitral murmur is organic or functional.

We admit that, *occasionally*, difficulty does exist in making a differential diagnosis in the cases alluded to, but auscultators have always (except, perhaps, Dr. Hope) admitted this difficulty; yet here also,



attention to the accompanying symptoms, the origin of the disease, and above all, the changes produced by exercise, and medical treatment, will enable the practitioner to arrive at a correct conclusion.

31. In certain diseases of the heart it is difficult or impossible to localise the murmurs with accuracy, however pronounced they may be.

We also admit the difficulty, but are the prognosis or treatment affected by it?—provided we are enabled to distinguish between organic and inorganic diseases of the heart, we hold, that the refined diagnosis between an affection of this or that valve, however useful in establishing accuracy of observation, is but of little importance in practice.

32. Auscultation cannot distinguish the murmur of an aneurismal artery from the murmur produced by external pressure upon the vessel.

This has also long since been admitted by stethoscopists; but is the diagnosis imperfect?—by no means.

33. Physical examination does not enable us to distinguish congenital malformation from disease of the heart or large vessels.

Physical examination fails here, and so do general symptoms: congenital malformation may be guessed at, but cannot, with accuracy, be detected.

We have now performed the task we proposed to ourselves, and we dare say, our readers will agree with us, that a more agreeable one, might have been selected; but we felt it our duty to expose the shallowness of argument, the very evident special pleading, and above all, the assumption on the part of Dr. A., that all his readers are as little acquainted with the present state of auscultation, as we trust we have shown him to be. The *ignorantia elenchi*, is the species of reasoning, upon which Dr. A., evidently relies in his argument throughout. That Dr. A. has rendered great service to the cause of science, we gratefully acknowledge; that he may be an excellent practical physician, we readily admit—but that he is a sound or skilful stethoscopist, we very much doubt. The stethoscope has had many enemies to encounter; but we know of none, pretending to familiarity with its employment, who has made such a determined effort to throw discredit upon it, and to discourage others from learning its application.

---

*On the powers of Strychnine in the cure of Chronic Bronchitis.* By Dr. HENRY CLARKE, of Port Washington, W. T. (Illinois and Indiana Med. and Surg. Journ.)

In the treatment of no disease, or class of diseases, have I experienced more difficulty than in bronchial affections. And the utter failure of the practice, recommended by authors, proves conclusively

the absolute necessity of more attention being bestowed upon this subject. With this view, I offer to the consideration of the profession, a few remarks, not however preferring any claim to originality, but rather wishing to impress upon the minds of those afflicted, the actual necessity of making due exertions for relief, notwithstanding such disease may, perhaps, be pronounced incurable.

Strychnine was discovered by Messrs. Pellitier and Caventou, in the year 1818, and named by them Vauquelin, in honor of that distinguished chemist. After which they changed the name to Strychnine. It is so intensely bitter that it is said to give a decided taste to 600,000 parts of water by weight, and is but sparingly soluble in alcohol. It is one of the most virulent poisons; and, perhaps, inferior to none, except the highly concentrated prussic acid. Majendie killed a dog, by the administration of one-eighth of a grain. Its effects are to produce tetanus, and consequent immobility of the thorax, asphyxia and death. The curative effects of Strychnine in cases of Paralysis, both general and partial, as in hemiplegia and paraplegia, also in tetanus, obstinate cases of amenorrhœa, in chronic diarrhœa without pain and with thin serous discharges, which produce exhaustion, and in nearly all the various diseases to which the eye is subject, are too well known to require an insertion here.

My method of administering it is principally in powder, suspended in mucilage as a vehicle, or by making it into pills, preferring either to the tincture, owing to the insolubility of it in alcohol. In anhydrous alcohol it is perfectly insoluble, consequently no tincture can be prepared that will give an equal strength.

Having been afflicted severely for quite a number of years with Bronchitis, and finding no medicines which gave me relief, I was induced to try the effect of strychnine, which resulted in a perfect cure. My symptoms, when I commenced using it, were emaciation, night-sweats, and continued mucous expectoration, attended with cough, at times very severe, after which the muscles of the larynx were so completely relaxed, that I could not utter a sound above a whisper, but unattended with pain. I commenced the use of the strychnine as advised, by taking one-twentieth of a grain, suspended in mucilage, three times in a day, and increased the dose every third day until I took one-fifth of a grain. I used the remedy about four weeks, and have never experienced any difficulty since. I was much astonished at its results, and more especially at the effects it produced upon the contractility of the muscles of the larynx, as well as upon the muscles of the extremities.

CASE II.—A. B. S., an attorney after delivering an address, and exercising unusually hard the organs of speech by talking very loud, in returning home was caught in a shower, and drenched to the skin. Immediately after he was attacked with Acute Bronchitis. I knew nothing in regard to his treatment, but it resulted in Chronic Bronchitis, and he was unable to speak, for over three years, above a whisper. I prevailed upon him to make use of strychnine, and gave

it in pills made with flour, and ext. liquorice, and one-thirteenth of a grain of strychnine, increased until he took one-eighth of a grain; which amount he continued to take for nearly two months. He now experiences no difficulty in speaking, and thinks he has obtained a complete cure.

CASE III.—E. W. L., æt. 52, an itinerant preacher, was by degrees entirely deprived of speech, and remained thus for twelve or fifteen years. He had some cough and expectoration, slightly tinged with blood. He was, by my recommendation, last spring, induced to make use of the strychnine. Two or three months since I received a note from him stating that he was not perfectly cured, but sufficiently so to be able to speak in public, if he used moderation. After speaking he felt still an oppressive weakness in his chest, and slight tracheal irritation, but not sufficient to produce cough. He was directed to continue the use of strychnine as before. I have not heard from him since.

CASE IV.—A lady afflicted with occasional loss of speech, with neither cough or expectoration, but extreme emaciation, and had, as she expressed it, a continued "tickling and hacking." She was ordered to take strychnine. This I gave in tincture, six grs. to the fluid ounce of diluted alcohol. She commenced with three drops three times a day, and increased as in the other cases. This was attended with the most decided success.

Where there is a local determination of blood to the head it is necessary to deplete until that is removed, before using the strychnine. Morphine, to a certain extent, is an antidote to strychnine. Lembert introduced three grains of strychnine under the skin of a dog on one side of the spine, and six grains of morphine on the other side, without any visible effects following it; either of which alone would have caused death. \* \* \* \* \*

But in regard to strychnine as a remedy in Bronchial affections, and even in the forming stages of Phthisis Pulmonalis, I have the most implicit confidence in it, and think that the time is not far distant when Pulmonary Consumption shall be stripped of its manifold terrors, by the sanitary influence of this powerful remedial agent.

---

*Treatment of Primary Syphilis.* By W. C. ANDERSON, M. D., of the Seaman Retreat, Staten Island, New York.—(New York Journal of Medicine.)

From the ample opportunities afforded at this institution to ascertain the best method of practice to be pursued in the treatment of syphilis, I think some important results have been obtained, from which I have been led to adopt a mode of practice not generally known, or at least, as far as I am aware of, not generally resorted to. My attention was first called to this mode by an article in the Medical and Surgical Reporter, for June 27th, 1846, by Dr. A. L. Cox, of



this city, which, however, that gentleman does not claim as original, but gives the credit of its first suggestion to Dr. S. A. Cartwright, of Natchez, Miss. It consists in the administration of calomel in large doses, followed by purgatives, and repeated daily. Not given with a view to salivation, although that result did happen in two or three cases out of fifty treated by this method. Previous to adopting the calomel treatment, I was in the habit of giving in specific ulcerations of the genital organs, the per-chloride of mercury, in combination with the compound syrup of sarsaparilla; an eighth of a grain of the former to two ounces of the latter, twice a day. Under the use of this, indurations were removed, and sores took on a healthy character in from fourteen to twenty days. Occasionally the gums became sore, but this result did not take place with any thing like the uniformity which it did when the pil. hyd. was used. Local dressings of sol. chlor. calcis with lint was the only application in general resorted to, although it sometimes happened that mercurial washes were found to expedite the cure; and again, in very irritable sores a wash of the solution of opium was frequently required.

The method of giving the calomel was to begin at once with scruple doses, followed in six hours by the compound infusion of senna. This course was repeated every morning until the character of the sore was changed, unless it was found to produce too much cathartic effect, or to affect the gums.

The following cases will illustrate the mode of procedure, and its success.

CASE 1.—H. C., æt. 20. Admitted September 7th, for pains in his bones of three weeks' duration, and chancre on the prepuce of ten days, being the re-appearance of a sore which had a short time previously been dried up by the application of sulph. cupri, but which left an induration. He had a bubo last winter, when the sore was first contracted. Treat.: cal. ℥j. followed by inf. senn. comp. ℥ij. 9th, Repeat same. 10th, Repeat same. 11th, Repeat same. Discharged cured Sept. 14th. Duration of treatment, seven days.

CASE 2.—J. S. W., æt. 23. Admitted September 7th, with phymosis and chancres on the edge of the prepuce of five days' duration. Slight enlargement of the glands of left groin. Treat.: cal. ℥j. R. Inf. sennæ comp. 9th, Cal. ℥j. R. Inf. senn. comp. 11th, R. Cal. ℥j. followed by eccoprotic mixt. 12th, Has had chills, followed by fever, pulse 120, tongue furred. R. Inf. sennæ. R. Pulv. Doveri, gr. iij., pulv. ipecac., gr. j. Repeat every three hours. 18th. Had another paroxysm of ague yesterday. R. Emetic, followed by quinine. Discharged cured September 23d. The sore had been healed several days. Duration of treatment, sixteen days.

CASE 3.—J. W., blk., æt. 24. Admitted Oct. 9th, for chancre on the glans, of one week's duration, and bubo in the right groin. Treat.: cal. ℥j., followed by inf. sennæ comp. The sore readily healed under the use of simple dressings. Discharged cured Oct. 16th. Duration of treatment, seven days.

CASE 4.—J. M. B., æt. 27. Admitted Oct. 1st, for ulcer upon the pubis, of forty-two days existence; overhanging, livid edges and fetid discharge. Treat.: cal. ðj., followed by inf. sennæ comp. 3ij. 3d, Repeat same. 5th, Complains of soreness of gums; the ulcer has put on a healthy character; red granulations are shooting up; for a local wash the sol. chlor. sodæ has been used. Discharged cured October 17th. Duration of treatment, sixteen days.

CASE 5.—J. L., æt. 19. Admitted Sept. 10th, having a large syphilitic sore on the lower side of the penis, of three weeks duration. Treat.: poultice to sore. R. Cal. ðj., followed in six hours by mist. eccoprotic. 13th, Repeat cal. and eccop. 15th, Repeatsame. 19th. Repeat cal., with inf. sennæ. 21st, Mouth slightly touched; omit medicine. Apply ung. hyd. rub. to sore. Discharged cured, Oct. 26th. Duration of treatment, 46 days.

This sore was of that species of ulceration, which is generally very obstinate, healing in the centre, and spreading on the edges in the crescentic form, and sometimes requiring months to effect the healing process.

CASE 6.—T. E., æt. 36. Admitted Nov. 3d, for ulceration of the extremity of glans penis, of three weeks' duration, with partial paraphimosis; the ulcer about the size of a shilling piece. Treat.: poultice. R. Cal. ðj. 5th, Repeat cal. ðj., followed in six hours by inf. sennæ comp. 6th, Repeat same. Discharged cured, Nov. 11th. Duration of treatment, 8 days.

CASE 7.—A. P., æt. 26. Admitted Nov. 5th, for fistulous bubo, of twenty days duration, and chancres on corona glandis, which appeared a few days before the former. Treat.: poultice to bubo. Sol. chlorid. calcis to sores. R. Cal. ðj., followed by inf. sennæ comp. 7th, Dilated sinus in groin, and dressed with lint. Repeat cal. ðj. and inf. sennæ comp. 9th, Repeat same. 11th, Repeat same. 13th, Repeat same. Discharged cured, Nov. 19th. Duration of treatment, 14 days.

CASE 8.—B. F., æt. 35. Admitted Nov. 3d, for chancre on corona glandis, of two weeks duration, and bubo in the right groin, of seven days. Treat.: cal. ðj. The treatment was pursued after the same manner as the above. The bubo did not suppurate, having been dispersed by the application of Ricord's caustic. Discharged cured, Nov. 26th. The chancre having been well for several days, but he was detained for the purpose of healing up the issue. Duration of treatment, 23 days.

CASE 9.—C. W. E., æt. 20. Admitted Nov. 7th, for phymosis and ulceration underneath the prepuce, which is indurated and œdematous, and cannot be retracted sufficiently to view the ulceration. A copious dark brown fetid discharge issues from the orifice. He has also a bubo in the right groin, which has suppurated. The whole of three weeks' duration. Treat.: poultice to bubo and penis. The calomel treatment with purging was continued for six days, when the prepuce could easily be retracted, affording a view of the

---

ulceration underneath, which extended half way around the corona glandis, with elevated edges and brownish discharge. Discharged cured, Nov. 30th. Duration of treatment 23 days.

Numerous cases of this description could be given, but the above will be sufficient to illustrate the manner in which syphilis, in its primary form, is here treated. Another advantage, which I have not observed under other methods, is that the worst and most forbidding cases of phymosis are reduced without the necessity of an operation, which is sometimes followed by unpleasant consequences, such as the cut surfaces taking on the same character as the original sore; and always more or less œdema and infiltration, which greatly retards the cure.

---

*Typhoid Fever, as it appeared at Geneva, in the fall and winter of 1846-7.* By GEO. C. HAY, M. D., of Geneva.

As the subject is attracting considerable attention at present, particularly in our large sea-port towns, where crowds of emigrants are daily landing with this form of fever, the following excellent description, &c., of it is taken from the last No. of the New York Journal of Medicine:

Fevers of a remitting type have prevailed quite extensively during the latter part of the last summer, and during nearly all the fall months, but not a single case, as I can ascertain, died of it at that time. In December, the first cases of the low form of fever showed themselves. All the cases which have occurred seem to be confined to a neighborhood of from one to two miles square; and beyond the limits of this, as far as I can learn, no cases have appeared. The symptoms in the forming stage differed but little from an attack of ordinary fever, commencing with loss of appetite, sense of lassitude and disinclination to exercise of any kind, chilliness, pains in bones, etc. After twenty-four or forty-eight hours headache came on invariably in all the cases, and in many it was the first symptom, and continued very obstinate through the whole course of the disease. About the third day the patients were generally obliged to take to their beds, the headache increasing, attended with vertigo, dimness of vision, ringing in the ears, suffusion of the conjunctiva and deafness. The tongue was at first covered with a thick white fur which changed by the fourth or fifth day into a brown, and finally into a black during the latter stages of the disease. In a great majority of the cases diarrhœa was a prominent symptom from the commencement, so much so that even the use of the mildest febrifuge medicines was inadmissible; this was controlled with great difficulty by opiates, and in some cases astringents had to be resorted to. Accompanying this diarrhœa, we found considerable tenderness of the abdomen in nearly all the cases. The discharges from the bowels were generally



very watery, of a dark color, very fetid, the urine scanty, sometimes entirely suppressed, and of a very red color. The skin was generally quite dry, although not very hot at any time, and in no case could I discover any of the "calor mordax" spoken of by writers, and which I have frequently felt in similar cases. As the disease progressed, in many cases delirium was a constant attendant through the whole course of the fever, and none were entirely free from it. In many cases the collapse came on very suddenly, and in others a gradual sinking came on, and steadily progressed until the patients died. The collapse seemed to bear no relation whatever to the severity of the first stage, as is generally the case, as sometimes in those who had been attacked but slightly, the collapse was sudden and fatal, while in those whose stage of excitement had been very severe the collapse came on very gradually, and progressed slowly, and *vice versa*. As to the post-mortem appearances I can give you but little information, as owing to the prejudices existing among the people it was next to impossible to procure an examination. After I had left, however, one examination was made of a boy aged fourteen, who died very suddenly, and I understood from a physician who was present, that his bowels were a complete mass of mortification. As to the treatment it was very various. All the patients, however, had in the commencement mercury, in some of its forms, and in two cases which have since recovered, it was carried to the extent of slight salivation. Some cases were bled generally, and some not, but it seemed to make but little difference in the continuance or violence of the disease. The local treatment consisted in cold applications, leeches, and blisters to the head and nape of the neck; cups and blisters to the chest, when the symptoms seemed to demand; hot fomentations, poultices, leeches, and blisters to the abdomen, etc. In some cases we ordered the patients to be washed over the whole body with a solution of nitro-muriatic acid made as strong as they could bear it; this was done twice in twenty-four hours, and seemed at least to give considerable temporary relief to the patients. The general treatment was at first calomel, hyd. cum cretâ, or pil. hyd., followed by the liquor ammoniæ acetatis, or spiritus ætheris nitrici, with the potassæ nitras, or vinum ipecacuanhæ or antimonii; but in some cases, and indeed in many, their use was impossible, on account of the tendency to diarrhœa, as every thing taken into the stomach ran off by the bowels in a short time. In all the cases stimulants and tonics had to be resorted to sooner or later, but generally with little benefit, although at first the patients seemed to rally under their influence, yet they seemed to have no permanent effect in many cases. Those used were the infusum sepentariæ, or columbæ, camphor, ammonia, etc., together with sulphate of quinine, port wine and brandy, with a nourishing diet of beef-tea, chicken-jelly, arrowroot, etc. I forgot to mention that the pulse was in most cases very frequent, from the commencement, ranging from 100 to 130 and 140 during the whole time. In some cases the pulse was quite full and hard in

the commencement, but generally it was quite small and very easily compressed. I may say in conclusion that it seemed to matter little what course of treatment was pursued, the patients in a large majority of cases died, some during the first week, others running on four, six, eight, and ten weeks. In one family, five persons died, all between the ages of fourteen and thirty; indeed nearly all the cases have been young persons.

---

*Cold Water in over doses of Opium.*

To the Editor of the Boston Medical and Surgical Journal.

Sir,—I have been a reader of your valuable Journal for several years, and do not recollect seeing any communication respecting the application of cold water to the cranium in cases of over doses of opium, when taken for the purpose of committing suicide; or when injudiciously administered. As several cases of the kind have come under my observation, I take this opportunity to report them, and you are at liberty to do with them as you please.

*Case I.* A healthy child, aged 6 months, son of P. W., December 3d, 1845. A few days after confinement, the mother was troubled with abscess of the breast, for which six or eight powders of acet. morph., of one sixth of a grain each, were prescribed by the attending physician, to be taken as circumstances required. About four and a half months afterwards a swelling appeared about the groin of the child, and the mother remembering the good effects of the morph. upon herself, administered a powder to him, at 4 o'clock, P. M. Two hours had elapsed before I had arrived. I found the child as follows: Entirely insensible; countenance pale and Hippocratic; breathing stertorous; extremities cold; pulse scarcely perceptible; and, in fact, every appearance of immediate dissolution. An emetic of sulph. zinc and ipecac. was turned down, but the stomach did not respond to it. Hot flannels, wet and dry, were wrapped about the child, with sinapisms to the extremities and spine. We then commenced pouring cold water from the height of about four feet. This was continued at short intervals for five hours, when sensibility began to return, and the child recovered.

*Case II.* Mrs. C., of Dickinson, a robust woman, æt. 50 years, August 9, 1846, 11 o'clock, A. M., took full one drachm of best Turkey opium, after shaving to a powder, for the purpose of committing suicide. She told her daughter, (18 years of age) that she felt unwell, and would go and rest herself in an adjoining room for two hours, and did not wish to be disturbed during that time. Half-past 2, the daughter entered her room, and finding her insensible, sent for me. I arrived at 4, P. M., and found her extremities cold and clammy; entirely senseless; great prostration; feeble and irregular pulse; stertorous breathing in the extreme. From particular inquiry I be-

came satisfied that these symptoms were caused by an over-dose of opium—as she afterwards confessed.—Hot sinapisms, stimulating frictions and active flaggelation to the extremities; cold water from the well was then poured in a large stream from a hole in the chamber floor. Not having a stomach pump at hand, an emetic of sulph. cupri. and ipecac. was forced, with some warm brandy and water, but it was some time before it would operate, with the assistance of a feather to the fauces. No remains of the drug were evacuated that we could discover. The water was continued almost constantly for nearly six hours, before she began to arouse from the lethargic state.

*Case III.* Infant of A. S., of Moira, aged 14 days, December 5th, 1846. Being restless, a neighbor gave it two drops of highly concentrated laudanum, at 10 o'clock, A. M. I saw it at 1, P. M., and found its countenance pale and ghastly; eyes open and set in their sockets, with occasional winking of the lids; surface generally cold; breathing stertorous and exceedingly irregular, and having frequent convulsions. *Treatment.*—Hot sinapisms and hot flannels were applied, as in the former cases, with an occasional warm bath. Cold water was applied by means of wet cloths, and continued twelve hours, when the narcotic effects having subsided, recovery followed.

In regard to the above cases, I would remark, that I consider the success owing to the thorough application of the water to the head, thereby prolonging the powers of life until the suspension of the narcotic effects of the drug. From the experiments of Sir B. C. Brodie, who has clearly demonstrated that opium produces death by paralyzing the nerves of respiration, is it not possible that partial, if not entire congestion of the brain takes place in fatal cases? If so, may we not *rationaly* come to the conclusion that the refrigerating application has a powerful tendency to prevent such congestion, and therefore deserves the attention of the profession.

Moira, N. Y., April 6th, 1847.

F. H. PETIT, M. D.

---

*On the Accidents which result from the Puncture of a Nerve. Cause of Neuralgia.* By M. AUG. BERARD, Surgeon to La Pitié.—Condensed from La Nouvelle Encyclographie.—(New Orleans Medical and Surgical Journal.)

At the moment when a nerve is pricked the individual experiences an extremely sharp pain at the site of the wound, which radiates through the divisions of the nerve to the parts where it terminates. Sometimes the pain proceeds upwards towards the origin of the nerve. Having continued some days, rendering the motions of the part difficult, or preventing motion, it usually subsides, but is sometimes followed by more or less serious accidents, as excruciating pains, convulsions, tetanus, spasmodic contractions; usually confined to the parts to which the wounded nerve is distributed, and occurring in paroxysms accompanied with more or less suffering, occasionally ex-



tending over the whole body; and if the inferior limbs are involved, the patient is unable to walk or to support the motion of a carriage; or obstinate neuralgia may occur a considerable time after the infliction of the injury.

M. Bérard, in his own person, experienced neuralgia from a prick of the frontal nerve. For the purpose of a galvanic experiment a needle was forced into the external branch of the ophthalmic nerve, as it proceeds from the supra-orbital foramen, and an electric current was directed throughout the division of the nerve. At the instant, violent pains were felt over the forehead and crown of the head. The pains ceased when the needle was withdrawn, but some months afterwards a fresh attack of neuralgia was experienced in the division of the wounded nerve. The pain had the quotidian intermittent type, and gave way to the use of sulphate of quinine. Since this period repeated attacks of neuralgia have occurred, with many years' interval, some of which were excessively violent and long-continued, and always seated in the frontal branches, but sometimes extending to the nasal and lachrymal branches of the ophthalmic nerve.

A young person met with a cut with a penknife, in the forearm, above the wrist. A violent pain was felt in the forearm, wrist, and fingers; this was soon followed by spasms, while the voluntary motions of the fingers were either incomplete or impossible. Subsequently the spasms became general, and for two years the individual led a most miserable existence; the case being ultimately cured by repeated applications of the actual cautery. Similar symptoms occurred in a young woman, from a wound above the wrist, inflicted by a piece of glass, probably injuring the median nerve; and the following detail is drawn up from the case of a woman at present in La Pitié, with a similar affection, having been bled at the fold of the arm some time previously.

*Diagnosis.*—The symptoms of a puncture of a nerve cannot be confounded with those of any other disease. A wound corresponding with the site of a nerve, the pain propagated along the nervous filaments, tremblings, and convulsive movements, which resist all ordinary remedies, leave no doubt of the nature of the affection.

*Prognosis.*—The accident is in general exempt from danger, the pain ordinarily ceasing after a few hours, or at most a few days, but the disease becomes very serious when spasm, convulsion, and neuralgic pains continue. The patient may become the subject of continual torment for many years, and of sufferings which produce their influence over the whole economy. Happily these results have been observed in a few cases only.

*Treatment.*—When the wound is recent—rest, antiphlogistics, and opiates, the latter being indicated when the symptoms persist; friction in the course of the nerve, with oil and laudanum, or hyoscyamus, bathing the limb with decoction of poppies or of belladonna, the application of morphine by the endermic method, &c. But the disease, when fully established, most frequently resisting these mea-

tures, there remains no other resource but to destroy the affected nerve; for which purpose cauterization or incision may be employed. The first, although most painful, destroys a greater portion of the nerve; one application rarely succeeds. When incision is resorted to it should be done two or three centimetres from the wound, towards the nervous centre. The purpose may, perhaps, be equally well effected by subcutaneous section. In the few cases in which this operation has been resorted to the symptoms have subsided the moment the nerve was divided.

*Pathological Anatomy.*—The puncture of a nerve produces a circumscribed tumefaction in its substance, with effusion of blood into the cellular tissue between the nervous filaments and within the neurilemma. When the symptoms of acute inflammation have subsided, and the absorption of the effused fluid has taken place, there remains, according to Wolff, Béclard and Descot, either in the whole thickness of the nervous cord, or, if the puncture has been very limited, at one point of its circumference only, a hard, opaque swelling, of a fibrous consistence, which is invariably formed by a thickening of the cellular-fibrous tissue. This tumefaction may furnish a useful indication where accidents of this kind have resisted ordinary curative means.

---

*New Method of Treating Fractured Ribs.* BY A. J. HANNAY.  
(London Med. Gaz.—Am. Journ. Med. Sciences.)

For many years I have made use of adhesive straps as the restraining girdle around the chest, and with happy effect. The following is the mode of applying them:—I cut the most adhesive and best made diachylon plaster I can procure into strips four inches broad, and of sufficient length to surround the thorax with a tail, which, after meeting around the cavity, will reach fully a foot beyond the point of meeting. I place the patient in a warm apartment, and close to a good warm fire, so that the plaster may be readily and thoroughly warmed, and kept perfectly soft during the application of it. Having ascertained the seat of the fracture, and having the plaster thoroughly softened, I place the middle (the sailor would call it the bight) of the strap on the fractured points. An assistant and myself each pull the ends of the strap very tightly, whilst another assistant supports the patient by preventing him from yielding in the direction we are drawing the plaster. The patient also empties his chest by expiration, as forcibly as he can, at which conjuncture the strap is brought in contact with, and made to adhere to the chest, encircling it tightly all round; the ends are crossed over each other. This first strap, or girdle, is followed by a succession of them, laid partly over each other, or imbricated; each strap should cover a third of the width of the one next it; they are applied in the same manner as the first, which, in the end (from the straps reaching up to the

axilla, and down to the lower part of the chest, compressing that cavity powerfully) becomes slack, and another one is required to put round over it. I then, to secure the firm adhesion of this cuirass of plaster at every point, smooth it over with an Italian iron sufficiently, but moderately, heated.

I have now adopted this practice for many years in private, and have taught it to the pupils of the Glasgow Royal Infirmary, some of whom, with myself, can bear testimony to its facility of application, and its perfect efficiency. It is immediate in its relief, and does not generally slacken till its support is no longer needed. I need hardly add, that it enjoys its advantages from the adhesion everywhere diffusing over the whole surface of the chest a most equable pressure; whereas the sliding bandage usually employed comes to press most on the prominent parts, and is therefore inefficient. Besides, the stiffness of the strap affords a certain and very suitable amount of support, which the bandages hitherto employed to encircle the chest do not afford. Indeed, a piece of plaster is often put on the surface over the broken point below the cinctures in ordinary use in these cases. I have just recalled to mind the circumstance which led to my adoption of this method of treating fractured ribs. I was laboring under the most agonizing neuralgic pain of the thoracic parietes during my convalescence from continued fever. Many kind professional friends who visited me, suggested diverse remedies, but all in vain; the late Dr. Abercrombie at length suggested a broad strap of plaster to be wrapped tightly round the chest. It proved instantaneously and permanently effectual, and pointed out to me the value of the strap in all cases requiring a firm girdle round the chest, to check, or altogether prevent its respiratory movements. I have employed it also in cases similar to my own, since, with like success.

---

*On the Use and Abuse of Mercurial Preparations.*—(Medico-Chir. Review, from *Revue Médicale*.)

Dr. Sichel gives the following cautions as necessary in the exhibition of mercurial preparations:—

1. The *diet* must be in no-wise stimulant, and as little nourishing as possible. If this is not attended to the plasticity of the blood becomes augmented.

2. All notable change of atmospherical *temperature* should be avoided. Unless this rule be observed, numerous disappointments will occur, and premature salivation is especially likely to be induced.

3. It is a general law that the *special physiological action*, or the *toxic effects of a medicinal substance*, only manifests itself after its action upon the pathological condition has become exhausted.

The operation of this law is well seen in the employment of narcotics in those affections of the nervous system which afford distinct indications for their use, as neuralgia and tetanus. This last, we know, demands large doses of opium, but the point of saturation must



be carefully watched so that the drug may be laid aside when the precursors of narcotism begin to replace the tetanic symptoms; unless we wish to see, as I have often seen in the hospitals, the patient cured of the tetanus to die by opium. The physiological action of mercury is exerted upon the salivary glands, and with the earliest precursory symptoms of salivation, the blood has already lost some of its morbidly plastic character. It is indeed remarkable to what an extent acute inflammation becomes relieved, upon the appearance of the precursors of salivation, and how long these are in making their appearance in intense and essentially exudative inflammations, as iritis, peritonitis, and especially puerperal peritonitis. In this last we are sometimes surprised at finding the abdomen, which the evening before would not endure the weight of the clothes, supporting next day firm pressure of the hand, the precursory symptoms of salivation having manifested themselves in the interval. These are indeed the signs of the system having become sufficiently saturated with the mineral, which must be left off as soon as they appear, our object not being, save in very rare and obstinate cases, to excite actual salivation. Instead of then pushing on the mercury, if the disease does not yield, we must, in the case of inflammation, have recourse to other antiphlogistics; and in the case of syphilis, to iodine, sudorifics, &c., carefully limiting the regimen, and avoiding exposure to cold. When, however, the precursory symptoms are dissipated, and the disease has not yet yielded, we may turn again and again to the mercurial treatment. In syphilis this is almost always necessary.

It is from the non observance of the above rules, that so much mischief has been caused by this remedy, and so much prejudice has been raised against it. The excitement of profuse salivation is especially mischievous. The anti-plastic action of the drug may, after long use, so diminish the coagulability of the blood, as to produce a *mercurial scorbutus*, very difficult to cure. *Marasmus* may likewise be produced, especially in children and aged persons, if mercury be employed sufficiently long to induce ptyalism or diarrhœa, or the two conjointly. Calomel, particularly, must be given to such subjects with great care. It is not sufficient to withhold it when salivation or purging already exist; but at every visit the condition of the salivary organs and digestive tube must be carefully enquired into. From neglect of this precaution, infants often suffer severely from the prolonged use of calomel,

---

*On the action of Digitalis, and its uses in Diseases of the Heart.*

By W. MUNK, M. D., Physician to the Tower Hamlets Dispensary.—(British and Foreign Rev.)

This is one of those performances which we hail with the greatest satisfaction; were they more numerous we should be in a better position to contend with disease, and (what is of far smaller importance, but still of some moment) to answer the frequent taunts of our homœopathic opponents.

Dr. Munk has drawn his conclusions from upwards of 400 experiments with this drug, made with care, and recorded with accuracy; and he has, we think, established some very important points.

It is well known that digitalis exerts its influence specially on two organs—the heart and the kidneys. Now it appears from the researches before us, that these results depend very much upon the preparation employed—the *tincture* affecting the heart—the *infusion* acting upon the kidneys. If it be desired to lower the action of the heart *decidedly*, as in cases of hypertrophy, the *tincture* should be given *alone*, in moderately full doses. If we wish to relieve the palpitations, dyspnœa, &c., which form so large a portion of the distress of those who suffer from valvular disease, dilatation, &c., the *tincture* should be given in combination with camphor, assafoetida, musk, or other antispasmodics. In either case the patient should abstain from all exertion of mind or body. A plethoric condition is unfavorable to the action of the drug, and should be removed before its administration.

When the diuretic action is required, the *infusion* should be given in doses of from half an ounce to an ounce every six or eight hours, and the patient should take moderate exercise, and have the loins warmly clad, avoiding the production of diaphoresis.

Dr. Munk suspends its use if the pulse falls below 60, and does not persevere longer than a week, if the medicinal effects are not readily produced. With these precautions he has rarely seen any injurious effects from its employment.

---

### *A Case of Partial Double Monstrosity—Bipenis.*

In the April No. of the Medico-Chirurgical Review, is noticed an account of a curious *lusus naturæ*, by Wm. Acton, Esq., Surgeon to the Islington Dispensary. The child has also been exhibited in Paris, and the French surgeons agree with the author that the *third leg* (not one of the *penes*) ought to be cut off.

The subject of this curious case was a Portuguese child, six months old, exhibited in London during last Spring, and rendered sufficiently notorious by a placard not remarkable for its decency, in which the infant is characterized as “the Human Tripod, or three-legged child, and first Bipenis ever seen or heard of.” The monstrosity is thus described by Mr. Acton.

“Below the umbilicus, and to the right and left of the mesial line, are two distinct penes, each as large as the penis of a child six months old: their direction is normal. I may mention that water passed from both organs at the same moment, during the time that Dr. Cursham and Mr. Perry were examining the infant with me. Each penis is provided with a scrotum, the outer half of each scrotum containing

one testicle, the inner half of the scrotum is far removed from the outer, and the two inner halves appear like another scrotum between the two penes. Between and behind the legs of the child, we see another limb, or rather two lower extremities united together in their whole length. The upper part of this compound limb is connected to the rami of the pubis by a short narrow stem half an inch in length, and as large as the little finger, apparently consisting of separate bones or cartilage, for, on moving the compound limb, at the same moment the finger is kept on the stem, crepitation is felt, but I could not detect any pulsation. Immediately beyond this stem, and concealing it, the compound limb assumes a size as large as the compound natural thighs of the child, and within the upper part irregular portions of bone may be felt (probably a portion of a pelvis and the heads of the thigh bones), which may be traced down, united together into one mass, to a leg of comparative small size, though still larger than either of the healthy legs, and terminating by a double foot in the position of *talipes*, with the sole turned forwards, and furnished with ten toes, the two great toes being in the centre of the others: the two outer toes on each side are webbed.

“When the child is placed on its belly, the spine and back present a perfectly normal appearance; the anus is in its usual situation; the functions of the bowels are duly performed. Viewed in this position, the compound limb assumes a roundness and fullness equal to the buttocks of a young child, and a slight depression is observed, as if for the anus. Tracing the limb downward, we find only one patella, which is on the same aspect of the limb as the anus, the joint bends freely, and the compound extremity terminates as above described. This compound limb is quite motionless, the upper portion alone appears endowed with sensibility, its vitality seems low, as the toes have a bluish appearance; the upper portion, however, is of the same temperature as the body of the child.”

---

### PART III.—MONTHLY PERISCOPE.

*The sense of smell destroyed by closure of the posterior nares.*—M. Hutin presented an ex-officer of the army of Africa, who had lost the tonsils from an ulcerated sore throat. Since then the soft palate has contracted adhesions with the pharynx directly backwards—thus closing completely the posterior nares. Respiration is no longer effected through the nose; the closure is complete; he is not able to blow his nose, and when he feels the necessity of expelling the gathered mucosity, he is obliged to incline himself forward, his head downward, and wait till it falls out by its own weight. Not being able to breathe naturally, he perceives no odour, and is not conscious of the taste of what he eats, though he knows when food is sweet, salt, or acid, but he cannot tell when it is prepared, for example, with onions or orange flower water, &c.—[Trans. *Archives Gén. de Méd.*



*Remarkable Case of Protracted Lactation.*—Mrs. P., aged 39 years October 28th, 1846, never had a sick day since her marriage, December 9th, 1826, except the usual sickness consequent on parturition. During this period she has given birth to eight children, all of whom are now living and in perfect health. The order of their births is as follows:—Sept. 5th, 1827, female; Sept. 5th, 1829, female; March 28th, 1832, female; April 1st, 1834, female; November 11th, 1837, female; April 3d, 1841, male; April 17th, 1844, male; November 3d, 1846, female. Mrs. P.'s only brother and sister lived to adult age, and both died of *tubercular phthisis*. Both parents also died of the same disease. She was married young, and at the time considered a remarkably slender girl, being subject to cough upon the slightest exposure. She has been constantly nursing for a period of nearly twenty years—never weaning one child till the birth of another compelled her to, for the convenience of the infant. More than once, when *in labor*, I have seen her child of the last birth at the breast.

From a solitary case of this kind I would not draw a single inference; but should some of your numerous correspondents, from the abundance of their experience, contribute for the Journal similar cases with a like favorable result, might we not infer, contrary to the generally received opinions of medical men, that protracted lactation, especially during pregnancy, possesses a prophylactic power, even when there exists a well-marked hereditary predisposition to pulmonary disease.—[I. P. Smith, M. D., in *Boston Med. and Surg. Journ.*

*Iodide of Starch for Ascites.*—The 21st September, a man affected with dropsy entered the ward of M. Burguet. Having failed to relieve him by the ordinary means, M. B. proposed to try the external application of iodine, inasmuch as it was stated to cure puerperal peritonitis. The abdomen of the patient was covered with a pretty thick layer of iodine and starch, in the proportion of 3ss. of iodine to ℥iii. and grs. x. of starch. From the very first day, this article was easily recognized in the urine, sweat, &c., by its exhalation—the infiltration in the limbs gradually diminished, and then the ascites very rapidly disappeared.—[*Trans. Jour. des Con., Médico-Chirurg.*

*An easy mode of removing the bitter taste of Quinine, without injuring its therapeutic action.*—M. F. Des Voves, Student at the St. Louis Hospital, Paris, states that, by accident, he discovered a way by which quinine can be taken, even by infants, not only without repugnance, but with pleasure, so completely is its bitter taste destroyed. Being in Martinique in 1842, and about to take a dose of quinine as a cup of coffee was handed him, he put five grains of the article in a spoonful of this beverage; swallowing it down he was surprised to find it had no bitter taste. The other doses were taken in the same way, and his fever was cured. He has subsequently administered quinine in the same manner, and always with like results.—[Translated. *Idem.*

[We find by the latest French Journals, this subject is now undergoing investigation by the chemists and pathologists of Paris—some contending that roasted coffee destroys or injures the therapeutical properties of quinine, and others that it does not.]

*The Oil of common Fish instead of the Oleum Jecoris Aselli.*—M. Bretonneau (one of the most distinguished living physicians of France), was one of the first to experiment with the oil derived from the liver of the Cod-fish: he has now established, after a long series of researches, that this costly article can be replaced without any disadvantage by the oil of common fish. This is important; for the former is almost always uncertain, and extremely high-priced when obtained pure. The oil of common fish, that is of the whale, is cheap; is administered in the same dose and under the same conditions, and is not more disgusting than cod-liver's oil. Already has the observations of M. B. been verified by some of the physicians of the hospitals in Paris.—[Translated. *Bulletin de Thérapeutique.*]

*Coffee as a remedy for Neuralgia.*—It is stated that a female under the care of M. Piorry, had, after parturition, being attacked with a neuralgic affection of the frontal branch of the fifth pair of nerves, which after resisting a number of the ordinary remedies, yielded completely to a continued use for many days of a very concentrated decoction of coffee.

Another case also is mentioned in which the success of this remedy was generally marked. A woman affected with the same form of neuralgia, which had been unavailingly treated with the valerianate of zinc and quinine, became cured by combining the use of strong coffee with the above remedies. The therapeutic effects of the drug were well marked in her: a draught of a very strong decoction of it at the commencement of a paroxysm of pain being quite sufficient to prevent its continuance.—[*Gaz. des Hopiteaux—Med. Gaz.*]

*Hooping Cough.*—Purgation with calomel; if febrile symptoms, calomel and antimony; an occasional emetic, and small and repeated doses of carbonate of potassa, or the following formula: Potassæ carb. 3j.; coccus cacti, gr. x.; aq. fervent, q. s. The dose according to age; for an infant, a teaspoonful thrice daily. (Dr. Allnatt.)

Dr. Wachtl, of Vienna, recommends the ammoniated tincture of cochineal.

In the first stage, mild antiphlogistics, daily emetics, and strict confinement to the house, except in summer months. In the latter stages give the following:—Tincture of cantharides, tinct. of opium, comp. aa. ʒss.; tinct. cinch. co. ʒvss. A teaspoonful to be taken three times a-day in a little boiling water; the dose to be increased if no strangury is produced. Be careful, however, at all times, not to give opium if it can be avoided. (Drs. Graves and McGregor.)

*Case of Poisoning from swallowing Percussion Caps.* By T. W. FOSTER, M. D., of Keene, Jessamin county, Ky.—Not long since I was called in great haste to attend an infant, æt. 14 months. Upon entering the room, I was informed by the parents that they had observed their child, about two hours previous to my visit, playing with a box of percussion caps, and they supposed she had swallowed some of them, as signs of acute suffering were exhibited soon after.

The little patient appeared to be sinking very fast. The eyes had a hollow, glazed appearance; there was great heat in the epigastric region, and coldness of the extremities; there had been eight or nine discharges from the bowels in an hour, and her general aspect denoted approaching collapse. Before my arrival free emesis had been produced by some domestic remedy, yet I continued the vomiting by administering ipecac. and large draughts of warm water, (of which the patient greedily drank,) with the hope of discharging at least a portion of the offending matters. The discharges became so debilitating, however, that I threw up an injection of eight drops of laudanum, suspended in starch mucilage, and immediately afterwards gave a large dose of calcined magnesia. An alkaline purgative was selected for the purpose of neutralizing any acid which might be found in the stomach or intestines, and thus prevent any chemical change in the copper. In the course of an hour the child became perfectly composed, and fell into a pleasant slumber, though it had previously suffered excruciating pain, attended with spasms. Dr. Spilman, the family physician, now took charge of the case, and applied counter-irritation to the abdomen. On the next day four caps were discovered in the fæcal matter, which were found to be devoid of their fulminating powder. The child is now enjoying very good health.

[*Medical Examiner.*

*The effects of one Stramonium seed.*—Dr. Ashmead related a curious case of impaired vision, with dilatation of the pupil of one eye. The patient had the day previously taken up a dry head of stramonium and shook it several times, to cause a rattling of the seeds contained in it. On the ensuing morning, an irritation was felt in the affected eye, which caused the patient to rub it, when he perceived a foreign body beneath the lid; this, when extracted, was found to be a seed of the stramonium. Soon after its removal the impairment of vision and dilation of the pupil disappeared.—[*Summary of Col. of Physicians of Philadelphia.*

*Arseniate of Quinia.*—This salt, first prepared by M. Bourières, has latterly been much used in France in the treatment of obstinate intermittents, and, it is stated, with much success; the chief obstacle to its more general employment being, according to Dr. Boudin, its extreme bitterness. It is readily prepared as follows:—Dissolve half an ounce of sulphate of quinia in boiling water, and precipitate with ammonia; wash and dry the precipitate, and dissolve it with the



aid of heat in three ounces of distilled water, containing two scruples of arsenious acid in solution; as the solution cools, crystals of arseniate of quinia are deposited, which are to be dissolved in distilled water and recrystallized. It is a light, white salt, crystallized in brilliant satiny needles. It is soluble in water, but more so in boiling than in cold water; it is also soluble in weak alcohol, but is insoluble in absolute alcohol or in ether. The dose of it is from one to two grains in divided doses in the course of twenty-four hours. It is usually given in solution in distilled water, to which a little simple syrup may be added.—[*Philadelphia Medical Examiner*.]

*Treatment of Erysipelas by the application of Camphor in Ether.* For the ointment of nitrate of silver, which furnishes good results in cases of erysipelas among very young children, but which is not always exempt from inconvenience, M. Trousseau has substituted the following: He covers the parts affected from the first day and during the continuance of the disease, with a strong solution of camphor in ether. This solution is composed of one part of camphor to two of ether. It is applied by means of lint wet five or six times a day, and then touching all the parts. The ether evaporates and leaves the surface covered with a light coat of camphor, which appears to possess great powers over the progress of the erysipelatous inflammation.—[Translated. *Bulletin de Thérapeutique*.]

*Treatment of Constitutional Syphilis in Infants.*—M. Trousseau has treated for some years, with success, the divers forms of constitutional syphilis in sucking children, as follows:—He administers daily to the mother and child a bath of corrosive sublimate of the following proportions, viz., corrosive sublimate from  $\frac{1}{2}$  to 1 ounce, alcohol 4 ounces, to an ordinary bath. Moreover, if the child is nursed by its mother, he gives her daily a pill of one grain of protoiodide of mercury; but when on the contrary the child is not suckled, he orders the child every day  $2\frac{1}{2}$  drachms of syrup of sugar, and 20 drops of the following solution:—Corrosive sublimate, 20 grs.

Water, - - - 2lb. 8 $\frac{3}{4}$ . Mix.

Each dose will thus contain  $\frac{1}{50}$ th of a grain of corrosive sublimate.

Ever since M. Trousseau has had recourse to this mode of treatment, he affirms never having seen the least accident result from the administration of the baths of corrosive sublimate or from the solution. In a practice where he prescribed each day a great number of these baths for cutaneous or syphilitic affections, he never met with a single case that justified the apprehensions commonly entertained from their use. The baths of corrosive sublimate have no other immediate effect than to compose to sleep. It is rare that children, and even adults, after having taken a bath of this kind, are not compelled to yield to the desire of sleep which overcomes them. There are perhaps some special conditions, wherein they would be improper, but in most instances they are advantageous, and never dangerous.—[Translated. *Journ. de Méd.*, from *La Lancette Canadienne*.]

*Hemorrhage from the Nose.*—Introduce the little finger into the nostril, and press upon its floor until the bleeding stops; then take a dossil of lint, and roll it upon powdered alum, and press it upon the floor of the nostril with the little finger. Introduce pieces of lint, in this way, until the roof of the nostril supplies the pressure of the finger. (Dr. Oke.)

*New mode of reducing Paraphimosis.*—A man entered the wards of M. Blandin, then in charge of M. Chassaignac, affected with paraphimosis, of eight days standing, and having an induration semi-cartilaginous of the prepuce. M. C. employed in this case a practice which he had used with success a dozen of times before. The penis was held in the fist of one hand, while the pulp of the thumb alone of the other was applied to the glans. The thumb compressed the glans penis, and the other hand embracing the body of this organ, gently drew the retracted prepuce forwards. These manœuvres it is necessary sometimes to continue for half an hour, and the surgeon may even require assistance to apply the requisite degree of force. Since the introduction of this mode of reduction, M. Chassaignac has met with no irreducible paraphimosis. Some days after the patient is thus relieved, and when the inflammation has been subdued, the operation of phimosis may be performed to prevent the return of the former affection.—[Translated. *Journ. des Connaissances Médico-Chirurg.*

*An ingenious Operation for Phimosis.*—M. Vidal (de Cassis) draws the prepuce in front of the glans penis, passes a fine needle armed with a long ligature before the head of this organ and through the fore-skin stretched over it, making five or six points one-quarter of an inch apart—the redundant prepuce is then cut off just anterior to these threads. The part retracts, the loops of the ligature are now cut as they lie over the glans penis, and by tying each one separately, the skin and lining membrane of the remaining fore-skin are brought accurately in contact. Reunion is almost always effected by the first intention. This operation is now regularly performed at the hospital to which M. V. is attached.—[Translated. *Bulletin de Thérapeutique.*

*Cure of Nævi.*—In flat nævi up to the size of a crown-piece, lint steeped in pure liquor plumbi is fastened over the part with a bandage, and wetted by fresh applications of the lead, without frequent removal. After days or weeks, the swelling becomes whiter, flatter and firmer; soon afterwards little firm, white spots form on the surface, and the cure is certain. By means of a solution of alum and compression, nævi so large that extirpation would have been impossible, have also been cured. It may be necessary to keep the remedy constantly applied for six months.—[*Dieffenbach's Operative Surgery*, from *Ranking's Abstract*.

*Bifid Vagina.*—Prof. Dickson says that, Mrs. — came to the city, 1839, to consult him. She has been two years married—has always suffered from irregular and scanty menstruation; it is but a few months since she has become aware of the existence of some genital malformation. The vagina is divided—neither longitudinally nor transversely, but obliquely—by a membranous partition. Both tubes are long and narrow. Coition is difficult, particularly if the right (and somewhat anterior) opening be entered. [How is this ascertained?—Can the patient tell?—*Edt.*] The left, which is obliquely posterior, leads to the uterus, the os tinæ presenting; the right conducts to the side of the uterus in which the membranous partition looses itself; the cul de sac is not to be reached by the finger; a long probe or bougie may pass up six inches or more, but gives pain, and when withdrawn, is coated with bloody mucus. The dividing membrane lies in loose folds; is smooth and well lubricated; it projects slightly between the labia. It possesses very little sensibility.

[*Southern Journ. of Med. and Pharm.*

**PRESCRIPTIONS.** *For Coryza*—by M. Deschamps.—Injections often repeated, of three grains Ext. of Opium to water one ounce.

*For nervous, sleepless and hysterical cases*—by A. Brigham, M. D., Editor Amer. Journ. of Insanity, &c.—Tinct. of Lupulin and Hyoscyamus, each, 4 ounces; Gum Camphor, 1 drachm; Oil of Valerian, 32 drops. Mix. Dose—one to two drachms.


*For violent Mania, with deficient urinary secretion*—by Dr. A. B. Tinct. of Digitalis and Squills, each, half an ounce; Wine of Antimony and Nitric Ether, each, 1 ounce. Mix. Dose—30 to 60 drops.

*For debility and loss of appetite*—by Dr. A. B.—Tinct. of Bark comp., 1 ounce; Gentian, 3 ounces; Capsicum, 2 drachms; Sulph. of Quinine, half a drachm; Sulph. Acid, 15 drops. Mix. Dose—one drachm in water, or better in ginger tea.

## MEDICAL INTELLIGENCE.

**Dr. GARVIN'S withdrawal as co-Editor.**—Dr. Garvin having withdrawn from the Journal, it will hereafter be under the direction of Dr. P. F. Eve.

In parting with the Doctor, as co-editor, he has my thanks for what he has done for the Southern Medical and Surgical Journal, and my sincere wishes for a long life of useful application of his eminent talents and great acquirements.

 In assuming the control and management of the Southern Medical and Surgical Journal, the Editor will say but little. The work has been revived and sustained thus far by the kind and fostering care of its friends. Having now been established upon what is believed to be a solid foundation, it must stand or fall by its own merits. If the matter it contains is not worth the subscription price, let the enterprize fail—it will no longer solicit patronage alone



for the sake of support, but will strive to *demand* it, by its own intrinsic worth. It commends itself to the Southern practitioner of medicine, as the oldest Journal in this section of our country; since its revival in 1845, although issued monthly, it has never once been behind time, a circumstance unparalleled any where; no other similar work presents the same variety of professional intelligence; it is one of the cheapest medical periodicals in any country, not only as regards the number of its pages, but especially in reference to the quantity of matter it contains.

The present editor was the first to suggest a Southern Medical and Surgical Journal, for which he issued a prospectus, more than twelve years ago. He is fully sensible of the work before him; knows the many hours of toil he must endure; the task to be monthly performed; the privations to be undergone; and how much he has to accomplish, by industry and perseverance alone. Believing he is in the path of duty, relying upon the co-operation of the friends of Southern literature and medicine, claiming indulgence for his many imperfections, and depending upon Divine Providence for continued health and disposition to labor, he will try to redeem the pledge by conducting the Journal as heretofore. He desires, as long as he lives and belongs to the profession, to be connected with it; for he loves work, whether it be with the lancet or pen, for *work's* sake.

*The Annalist.*—Since our last issue, 17 Nos., inclusive from the first, have been kindly sent us. This new Journal purports to be a record of practical medicine in the City of New York. It is edited by Wm. C. Roberts, M. D., and was commenced last October. Each No. contains 24 pages, and one is published the 1st and 15th of each month. Price, \$2 per annum in advance. The publisher, Mr. D. Adey, assures the medical profession, that the permanency of the Journal is beyond the contingency of failure.

The June No. came in good time; and having examined the pages of this periodical from its origin, we recommend it as worthy the liberal patronage of the profession.

*Medical Miscellany.*—Mr. Sibson, of Nottingham, says he has seen several cases of facial neuralgia relieved by the inhalation of ether.——Thirty Surgeons of London have sworn that their annual income by practice amounted to \$50,000 each, and three to upwards of \$100,000. Sir Astley Cooper's business in his best days was about £23,000, or \$115,000 per annum.——The *Moniteur*, government paper of France, states that during ten years, there were tried in the various criminal courts 41679 male prisoners, above the age of twenty-five years; among them were 33 priests, 33 lawyers, 75 notaries, 65 tipstiffs, but not a single medical practitioner.——During the past twenty-one years, 33 students belonging to the Faculty of Medicine of Paris, died from dissecting wounds. In the same city, the rate of mortality among students of law, is 1 in 80; in the military school, 1 in 75; in the medical school, 1 in 50. The mean annual mortality in Paris is 1 in 51; in the prisons it is 1 in 15, and in the hospitals 1 in 6.——The London *Lancet* says, that the number of surgical operations have been double in the London hospitals since the introduction of the etherial inhalation.——A lady of Alabama, is said to have presented her husband with 5 children in 10 months—the first three died, but the twins were living.——A negro girl 18 years old, was recently delivered, in one of the upper counties of Georgia, of 4 still-born children.

*Death of the great French Surgeon, LISFRANC.*—By recent arrivals from Europe, we learn the death of this justly celebrated Surgeon. He was born in 1786, in a small village near Lyons. In 1812, at the age of 26, he held the post of Surgeon of the first class, and served in several campaigns under the great Napoleon. After the peace of 1815, Lisfranc settled in Paris, and soon obtained the place of Surgeon to La Pitié Hospital. Although not a professor in the school of Medicine, he regularly delivered clinical lectures, and had a large private class which he instructed in Operative Surgery. We are indebted to him for many valuable improvements in the profession; in fact, as a *medical Surgeon*, he has probably left no equal.

He was a man of great athletic powers, and possessed a stentorian voice. Under a rough exterior, and exceedingly blunt manners and harsh expressions, particularly towards his rivals, he had kind feelings and much goodness of heart. He was a friend to the poor and needy, and his services were ever ready at the call of sickness and distress.

He fell a victim to pseudo-membranous croup, at the age of 61; and left the regret that his work on operative medicine was not complete.

**METEOROLOGICAL OBSERVATIONS, for May, 1847, at Augusta, Ga.** Latitude  $33^{\circ} 27'$  north—Longitude  $4^{\circ} 32'$  west Wash. Altitude above tide 152 feet.

| MAY. | Sun Rise. |           | 4, P. M. |           | WIND. | REMARKS.                            |
|------|-----------|-----------|----------|-----------|-------|-------------------------------------|
|      | Ther.     | Bar.      | Ther.    | Bar.      |       |                                     |
| 1    | 57        | 29 65-100 | 72       | 29 66-100 | W.    | Cloudy—blow—dust—shower.            |
| 2    | 60        | " 64-100  | 76       | " 70-100  | S. W. | Cloudy—light shower.                |
| 3    | 62        | " 80-100  | 64       | " 86-100  | N. E. | Cloudy—rain all night 55-100.       |
| 4    | 54        | " 89-100  | 62       | " 90-100  | N. E. | Cloudy—drizzle.                     |
| 5    | 51        | " 92-100  | 64       | " 92-100  | N.    | Cloudy—light breeze.                |
| 6    | 49        | " 93-100  | 70       | " 86-100  | N. E. | Fair—breeze.                        |
| 7    | 49        | " 75-100  | 76       | " 60-100  | S. W. | Fair. [f. and 50-100.               |
| 8    | 60        | " 45-100  | 66       | " 37-100  | S. W. | Cloudy—hail storm at 8 P. M., I     |
| 9    | 57        | " 34-100  | 67       | " 36-100  | N. W. | Some fly'g clouds—rain 40-100.      |
| 10   | 56        | " 44-100  | 70       | " 47-100  | N.    | Cloudy.                             |
| 11   | 58        | " 51-100  | 76       | " 52-100  | N. E. | Fair—large clouds. [storm.          |
| 12   | 60        | " 46-100  | 66       | " 33-100  | S. E. | Cloudy—light shower—thund'r         |
| 13   | 60        | " 35-100  | 64       | " 41-100  | N. E. | Cloudy—rain 20-100.                 |
| 14   | 52        | " 55-100  | 70       | " 56-100  | N. W. | Cloudy.                             |
| 15   | 57        | " 65-100  | 72       | " 70-100  | N. W. | Cloudy.                             |
| 16   | 55        | " 73-100  | 76       | " 76-100  | N. W. | Fair.                               |
| 17   | 60        | " 63-100  | 74       | " 60-100  | N. E. | Cloudy—rain at night 95-100.        |
| 18   | 58        | " 48-100  | 72       | " 48-100  | W.    | Cloudy—showery in the even'g.       |
| 19   | 56        | " 58-100  | 74       | " 63-100  | N. W. | Fair—some clouds.                   |
| 20   | 53        | " 73-100  | 80       | " 75-100  | W.    | Fair.                               |
| 21   | 56        | " 77-100  | 80       | " 75-100  | S.    | Fair.                               |
| 22   | 61        | " 73-100  | 66       | " 70-100  | S. E. | Cloudy and showery.                 |
| 23   | 62        | " 70-100  | 75       | " 75-100  | S. E. | Cloudy.                             |
| 24   | 59        | " 77-100  | 82       | " 76-100  | S.    | Flying clouds.                      |
| 25   | 63        | " 80-100  | 86       | " 78-100  | S. W. | Fair.                               |
| 26   | 66        | " 80-100  | 73       | " 83-100  | N. W. | Cloudy—showery. [and 5-100.         |
| 27   | 65        | " 82-100  | 66       | " 85-100  | N. E. | Rain all last night & to-day, 1 in. |
| 28   | 62        | " 88-100  | 71       | " 88-100  | N. E. | Cloudy.                             |
| 29   | 59        | " 85-100  | 81       | " 75-100  | N.    | Fair—flying clouds.                 |
| 30   | 59        | " 83-100  | 84       | " 70-100  | S. E. | Fair, do. do.                       |
| 31   | 63        | " 71-100  | 88       | " 71-100  | W.    | Fair, do. do.                       |

11 Fair days. Quantity of Rain 4 inches and 65-100. Wind East of N. and S. 12 days. West of do. 14 days.

# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—AUGUST, 1847.

[No. 8.

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE XXVIII.

*Practical Observations on Cutaneous Diseases, No. 3—Erectile Tumours: their Pathology and Treatment, with Cases—Ligation of Primitive Carotid Artery, &c.* By H. F. CAMPBELL, M. D., Demonstrator of Anatomy in the Medical College of Georgia.

The great frequency of erectile tumours renders it proper that our observations should be made public, even though we add but little of novelty to what is already known on the subject.

Aneurism by anastomosis may occur at any age; and though ordinarily a disease of but trivial importance, it at times, either by neglect, or from its locality, presents a case of the gravest nature, and worthy the most serious surgical consideration.

The term, vascular or erectile tumour, denotes a diseased formation of the tissues of a part, in which the increase in its vascularity is the chief characteristic. Now, though in the *beginning*, this increased vascularity forms but one of the prominent features of the tissue, *later*, it either entirely monopolizes the whole structure of the part by causing the removal of its parenchyma, or by a process, to be described, produces changes in the tumour altogether peculiar, rendering its structure *truly* erectile, like that of the corpus spongiosum penis, &c. The tumour, in these cases, is formed almost entirely of blood-vessels, whether principally venous or arterial, may be readily determined by its colour and appearance.

That form of this tumour designated, by Bell, Anastomotic Aneurism, proceeds entirely from the arteries, and consists in a dilatation of their smaller ramifications, which enlarge in such a manner as to



form a circumscribed, pulsating tumour, generally deep under the surface of the skin, though it may occur in almost any of the soft tissues of the body.\* With regard to the formation of these tumours, there exists a contradiction among pathological anatomists, i. e.—†Hasse, ‡M. P. Rayer, and a few others, stating that the *intervascular* cellular tissue is, in a great measure, removed, while §Mr. Erasmus Wilson, whose dissections and authority are highly reliable, contends that, this tissue is developed and enlarged by the telangiectasis, with the growth of the tumour, and always constitutes an important element in its anatomy.

Reasoning from an attentive observation of rather a limited number of cases, I am disposed to believe that both of these very adverse conditions occasionally obtain in these vascular growths, and that the anatomical condition of the intervascular tissue may, with propriety, be considered a characterizing feature, by which we may divide these tumours into two distinct classes: the pulsating and non-pulsating erectile tumours. In the first of these, the dilatation of the capillaries, being very rapid, far outstrips the development of the intervascular cellular tissue, which latter does perhaps, as stated by Rayer and Hasse, become absorbed or otherwise removed, thus affording little or no resistance to the arterial diastole, and allowing a thrill to be communicated to the finger, when applied, like true pulsation. In the *non-pulsating* erectile tumours, the exact converse of the above obtains;—here, the dilatation of the vessels has been slow, constituting for a length of time nothing more than a simple hyperæmia; that is a degree of increased vascularity, only adequate to the rapid growth of the part. In this, the vessels go on enlarging gradually, and always preceded in their dilatation by the increase in their investing tissue, which becomes indurated by pressure of the surrounding parts; and thus, the pulsation of these small arterioles

---

\* It is denied by some, that the aneurismal tumour described by Scarpa, occupying the place of the superior apophysis of the tibia, is really of this nature.

† “Whenever erectile tissue is developed, the cellular texture or parenchyma of organs is ere long removed, and the tumour consists exclusively of vessels closely interwoven and intimately communicating with each other.

‡ “Theoretical and Practical Treatise on Diseases of the Skin.”

§ “As far as my observations have gone,—and I have dissected many vascular nævi,—the vessels are enlarged in calibre with corresponding hypertrophy of their coats, enlargement of their meshes, with *hypertrophy of the intervascular tissue.*”—[Practical and Theoretical Treatise on the Diagnosis, Pathology and Treatment of Diseases of the Skin, p. 254.]

is completely nullified, by the resistance therein presented. In a word, the first is a fibro-vascular tumour, in which the vessels are predominant, *producing* appreciable pulsation, while in the latter, the fibrous tissue prevailing *precludes* it. The first is eminently a *vascular* tumour, with some fibrous tissue—the second a *fibrous* tumour, with much increased vascularity.

The pulsating variety, for a time, may be reduced by pressure and the emptying of its vessels, while compression produces but little or no reduction, even temporarily, in the non-pulsating form. And if this be continued for a time, as treatment, it tends much to increase them in both size and hardness, by adding to the irritation and effusion of coagulable lymph in their cellular tissue.

Both these forms of erectile tumour are subject to variations in size, colour, density and general appearance, still preserving their distinctive marks through all these changes. They are both frequently subject to hæmorrhages, though, in the pulsating variety, these are more immediately dangerous on account of their greater vascularity. Neither of these tumours is often the subject of treatment, yet both occasionally require attention, and are sometimes the source of much peril to the patient and embarrassment to the surgeon.

As an instance in each of these varieties, the two following well-marked cases may not be devoid of interest. Although the first, from the location of the disease and treatment required, may belong more legitimately to the surgeon than the dermatologist, yet from the anatomical structure of the morbid tissue, and also from the fact that such are treated of in works on this subject, I have felt justified in adducing it, as illustrative of the position here assumed.

CASE I.—Richard, a free man of colour, aged 21 years, had from early childhood been known by his parents to have a very small tumour on the left side of his tongue, near the apex. This tumour had never given any trouble, remaining stationary in size till within a year or two previous to my being consulted. Attention was then called to it by its rapid enlargement, darker colour and strong pulsation, which continued to increase, till in a short time, by its bulk and extreme sensibility, it materially interfered with mastication and enunciation. During the last two years, it had bled frequently, and of late, the hæmorrhage had been so profuse as to threaten the patient's life. When I first saw him, he was pale, anæmic and emaciated to the proportions of a skeleton, as much from starvation as

depletion, he not being able to take any thing but cold gruel, on account of the enlarged condition and great sensibility of the tongue, as well as its liability to alarming bleeding, if impinged upon. The tongue itself was occupied, on the left side, to the median line, and even encroaching on the right of it, by a strongly pulsating, nodulated tumour of a dark red hue. This filled entirely the buccal cavity on that side, and pressed outward against the teeth, which, by absorption of its tissues from pressure, had caused a deep ulceration from which the bleeding occurred so frequently. Upon pressure, the tumour could be readily much reduced in size, by evacuating its vessels of blood, but this was an experiment of some hazard, on account of its active hæmorrhagic tendency. The base of the tongue also participated in the enlargement, especially at its under surface, and from the continued irritation, the neighboring glands of the mouth were much swollen and painful. The case had been considered cancer of the tongue—had been treated as such, and I was consulted for that disease, and indeed, the whole appearance of the patient strongly simulated that of the carcinomatous cachexia.

The ulceration on the surface of the tumour was oblong in shape, and covered with dark coagula of the hæmorrhages it gave out. The patient had been using astringent washes, to check the bleeding, and at present was under no other treatment. The day after my first visit to this man, I was called to him, in haste, to restrain the profuse hæmorrhage from the ulcer, which had caused repeated syncope, and brought him to the extreme of debility. His condition was the following:—Hæmorrhage very profuse, and only ceasing during the relaxation of deliquium, which supervened whenever he attempted to rise; pulse almost imperceptible at the wrist; patient of course much alarmed at his condition.

On consultation with Drs. J. A. and P. F. Eve, ligation was determined upon; and as the most convenient and practicable, we chose the *Primitive Carotid* of that side, both on account of its more easy access than the external carotid or lingual, and further, because pulsation in it was more appreciable in the exhausted condition of the patient. I performed the ordinary operation in the lower part of the anterior superior surgical triangle, making an incision of nearly three inches, which extended somewhat below the omo hyoid muscle. The needle and ligature were passed without difficulty, the artery separated from its accompanying nerve and vein, and tied with a piece of saddler's silk. No blood was lost at the wound of



the operation, and the hæmorrhage from the tumour ceased immediately.

Day after the operation. Pulse, though much improved, still feeble and accelerated on any trivial exertion; tumour on tongue somewhat smaller and quite dark; ulcer covered with clotted blood; little or no pain in the tongue. Prescribed as diet, cold gruel and cold chicken soup.

Fourth day. Dressed the wound, which had healed by first intention, to within an inch of the ligature—a little healthy pus under the plasters: pulse much improved; tumour considerably flattened; in ulcer, no apparent change. Diet, as before.

Fourteenth day. Wound in the neck entirely closed, with the exception of a small aperture that gave egress to the end of the ligature,—this was thrown off on the twenty-fifth day—no hæmorrhage followed: the noose was entire on the thread. There had been no absorption of the ligature, but it had divided the remaining coat of the artery. A few hours after, I was called in haste to the patient, and found he had lost a small quantity of blood from the wound, though I think it most probably came from the very vascular granulations around the orifice made by the ligature. This healed rapidly without further accident or mishap. The tumour on the tongue had entirely disappeared—the tongue was of its natural colour and volume, except that where the deep ulceration had existed, there was a depression and whitish cicatrix—speech and mastication were performed with facility, and the restoration of the organ seemed complete. General health of the patient better than it had been for several years previous.

For nearly a year after the operation, the patient continued free from any return of his disease. At the end of that time, he complained of some pain, and there was also slight tumefaction on the opposite side of the tongue. He did not reside in this State, and it was somewhat over three months before I again saw him, during which time (it is by no means strange to relate), he had been under the treatment of various *Charmers, Cancer Doctors, and Conjurers*. When I did see him, his condition was fully as bad as when he first applied to me. The tumour now occupied both sides of the tongue; having passed from right to left, filled nearly the whole mouth, and had several small ulcerations upon its surface which bled frequently and profusely.

I proposed the ligation of the other common carotid, to which the

patient, but reluctantly, acceded. On consultation, the measure was abandoned as inexpedient. This miserable being died, a few months after, entirely worn out by successive hæmorrhages, starvation and hectic irritation.

REMARKS.—Reflecting upon the origin, progress, and termination of this case, it is perhaps sufficiently apparent that, in its commencement, it was one of simple anastomotic aneurism of the ranine artery; and its symptoms—viz., its pulsation, occasional flaccidity, yielding to pressure, its active and profuse hæmorrhages, and also its rapid increase, clearly characterize it as belonging to the pulsating variety of these erectile tumours. Its appearance on the opposite side of the tongue, its rapid growth there, and the facility with which it recurred in its original locality, may find an easy explanation in the disease having extended to the inosculating ends of the ranine branches, previous to the operation. After the ligation of the left artery, the impetus of the circulation being augmented, these already predisposed branches were readily dilated, and the disease thus fully established. The recently obliterated branches of the opposite side were, with facility, re-opened,\* and thus the disease *re-established* on the right side. The great rapidity with which this second dilatation took place, resulted from the fact that, the whole tissue of the organ was already inclined to that kind of degeneration, by the previous recent existence of the same disease in the part. And for this, we find a still more satisfactory explanation, as well as for the malignant ulcerative tendency of the tumour, in the observations of †Rokitansky on this subject. “There is an affinity,” says he, “between *aneurism* and *cancer*. The aneurismal diathesis is *never* extinguished; and frequently when, from some cause or other, one aneurism dwindles away, a new one immediately forms, either in the same artery or in a remote one. Frequently, too, the aspect of the patient and the decay of the organism bear the impress of *cancerous cachexia*.” This last assimilating general characteristic was pre-eminently existant, in the case above related.

The second case differs materially from the foregoing, though evidently in its *generic* characteristics it is pathologically the same.

---

\* A thing by no means impossible, after the observations and examples related by Stilling, and others, on Thrombus.

† Rokitansky, Oest. Jah., vol. xxvi. pp. 2 and 3.

CASE II.—Eliza, a colored woman, aged 27 years, belonging to Mr. A. W. W., of Burke county, had, for many years, a small indurated tumour in the cicatrix of the umbilicus, which she said was the result of pressure from the end of a corset-board. This remained apparently stationary for years, and gave no uneasiness or trouble, save the inconvenience its presence occasioned in the arrangement of her dress, &c. About three years previous to the application of her master to me, her menstruation became irregular, and occasionally she was subject to attacks of hysteric lethargy,—the tumour at each menstrual period became fuller and much firmer, till at length, during one of these, it discharged from a minute opening on its surface, a small quantity of blood. This discharge, and the progressive increase in the tumour, continued up to the time that she was brought to me.

When I saw her she was quite thin, and of an unhealthy complexion—with but little appetite; bowels constipated; pulse natural, though feeble. She was of the nervous temperament: her menstrual discharge was almost entirely absent. The tumour at the umbilicus was of the size of a large walnut, dense and resisting to pressure, and had upon its surface several small pits from which, on pressure, there oozed a small quantity of darkish blood. Her menstrual period had just ended; and, by her estimate, she had lost nearly a gill of blood by the tumour during the five or six days, and said that she had had one of her hysteric attacks during the time, or just before the discharge commenced. During her next menstrual period, she discharged from the tumour nearly four ounces of blood, after which it shrank considerably, and became much softer to the touch, though still quite firm and resisting. The discharge per vaginam was but inconsiderable. The case had been treated by compression applied to the tumour, but with no reduction in its size whatever: indeed, it was found rather to aggravate the disease than otherwise, insomuch that, when I examined it, she had on a contrivance by which the contact even of the clothes was prevented.

Removal of the tumour being determined on in consultation, the patient was subjected to the following treatment, previous to the operation, in order to restore as far as possible the tone of the general health, as well as that of the uterine system. The bowels were kept well open with comp. cath. pills, or an occasional dose of the comp. tinct. of jalap, and as an emmenagogue, the following prescription was put in requisition—viz :



---

R. Of Gum Myrrh, pulv.  
       " Fœtid, "  
       " Aloc. Soc. "  
       Canthar. Hispan. "  
       Sulphas Ferri, " aa. grs. 24.  
       Ol. Menth. Pip. gtt. 24.  
       Syr. Simp. q. s. to make 24 pills.\*

Of this, one pill was taken in the morning and at bed-time, till slight burning was experienced during micturation, when they were discontinued for a day or two, and again resumed, and continued till the supervention of the next menstrual period, at which time her general health was sufficiently improved for the performance of the operation.

The tumour was removed in the presence of Dr. P. F. Eve, and of my brother and associate, Dr. R. Campbell, of this city, by the application of a double ligature through its base, drawn sufficiently on either side, as entirely to destroy the circulation in it, and in four hours after I completed its excision with the knife. Very profuse hæmorrhage was the immediate result, but this was readily arrested by compression and the application of creosote, after which the wound healed rapidly. One or two applications of the actual cautery were necessary to destroy a few vascular granulations that seemed disposed to organize upon the cicatrix, but further, no after-interference was required. After the healing of the wound no discharge occurred from the umbilicus, and the uterus gradually resumed its function of menstrual elimination. She has had no hysteric symptom since, and now (six months after the operation) enjoys excellent health.

Upon dissection, I found the tumour to consist of a congeries of very minute blood-vessels ramifying through a remarkably dense cellular structure; in this there were but few cells, and the walls of these were not dilatable, but hard and resisting. The pits on its surface, as far as I could discover, did not communicate with any of these cells, but had the appearance of being superficial. On desiccation the tumour has become much reduced in volume, though those cells not destroyed have not become obliterated, but still remain open, proving the inextensibility of the intervascular cellular tissue.

---

\* A prescription, of my own combination, I believe, which I here take occasion to recommend as an efficient emmenagogue, in all cases where there is no organic lesion of the uterus, as engorgement, &c. I have found it particularly beneficial, where the irregularity depended upon an atonic condition of the uterine vessels.

In the foregoing I have endeavoured to shew the difference, so far as my own observations have gone, in the pathology, &c., of those two forms of erectile tumour, and in the above cases, I hope a pertinent illustration will be found to have been adduced. They were both very plainly of this order of morbid growth; and yet, that, in many points, they very essentially differed from each other, further comment is not needed, to elucidate.

From what has been shown in dwelling upon my first case, I should perhaps regret that the *right* carotid artery had not been ligated as well as the left;—the signal success of the first ligation, the long immunity after, from the disease, amounting for a time to complete restoration, all impel the conviction that, much benefit would have accrued from a second ligation—perhaps either entire relief, or a much more considerable protraction of life. Or would not ligation, with complete excision of the diseased tissue, have been more successful?

Case second requires but little or no comment; the tumour's vicariously eliminating the menstrual discharge is by no means singular, as such cases occur frequently, as also the influence of this uterine derangement on the nervous system;\* but my object in the foregoing has been more, to discuss the pathological condition of these external developments, and to urge the determining cause of difference between their varieties, than to adduce any thing new or before undiscovered, on a subject that has so long occupied many of the ablest and most distinguished of our profession.

---

ARTICLE XXIX.

*Resection of a portion of the Upper Maxillary Bone, for a Sarcomatous Tumour of the "Antrum Highmorianum."* By P. M. KOLLOCK, M. D., of Savannah, Ga.

Jenny, a negress, aged 50, presented herself to me about the latter part of December, 1846, to be treated for a swelling of the right side of her face, at that time about the size of a hen's egg, extending from about the junction of the malar bone with the upper maxilla, to the teeth, involving the alveolar process. On raising up the soft parts

---

\* The well known case of Hysteria, caused by a subcutaneous tumour of the mamma, and relieved by its removal, may possibly bear some analogy to this, so far as the nervous symptoms extend.—[Vide. Warren on Tumours, p. 40.]

of the cheek, there was exhibited a vascular swelling of the gum above the teeth, elastic to the touch, and apparently containing a fluid. The molar teeth remained, but were all loose. On extracting one or two, a pretty free hæmorrhage ensued, and a trocar passed easily through the alveolar process into the antrum, without encountering any bone.

The tumefaction of the gum extended into the roof of the mouth several lines beyond the palatine raphe. At this part the tumour was more firm; but a sharp instrument could be passed into it without encountering any bone, and produced free hæmorrhage also.

About one inch of the alveolar process in front, extending from the median line, and containing the two incisors and the canine tooth of the right side, remained sound. This was likewise the case with the gum in the roof of the mouth, extending from the alveolar process backward about one half inch; but the gum on the outside, above the teeth named, looked very vascular, and contained one or two small prominent points resembling tubercles.

A lancet thrust into the most prominent part of the tumour, on the outside, over the molar teeth, and which seemed to fluctuate, gave issue to blood, and not pus.

A temporising treatment was pursued for a few weeks, consisting for the most part, in the administration of a solution of hydriodate of potash.

Neither the patient, nor any one who has known her, can give any very distinct account of the origin and progress of this disease; but it seems probable, from all that can be ascertained, that it had been progressing to the condition in which I found it when first consulted by her, for some years. Nor can it be ascertained that it was the result of the operation of any external cause or accident.

Having watched the progress of the case for three months, and having obtained the opinions of all the medical men of Savannah, who are conversant with surgical cases, and also being convinced that the disease was extending, and involving other parts, I determined (notwithstanding the frequency of failure in such cases to eradicate the disease) to remove, as far as practicable, *en masse*, the portion of the upper maxilla which seemed to be involved in the disease, cutting into sound parts on every side; and in order to accomplish this, I foresaw the necessity, as well as the difficulty, of including a part of the palatine process of the left side, (the diseased part extending beyond the raphe.)



Accordingly, on the 18th of March, 1847, at 12 o'clock, M., in the presence of Drs. Habersham, Richardsone, Arnold, Tufts, and several other physicians and students, I proceeded to the operation in the following manner:—

The incision through the soft parts was commenced a little outside of the external canthus of the eye, at the junction of the malar with the upper maxilla, and carried down in a slight curve to the angle of the mouth, in front of the orifice of the duct of Steno. The flap, consisting of the whole thickness of the cheek, and including the ala of the nose, was dissected up and turned over the forehead, one or two small arterial branches requiring ligation. An incision of an inch in length, was extended from the commencement of the first, backwards, parallel with the zygoma, and the parts turned back, so as to expose the zygomatic fossa. Finding that the lip and ala nasi could not be sufficiently elevated, another incision was dropped from the columna nasi through the median line of the upper lip, and the right half of the lip and ala nasi were then turned up sufficiently to expose the nostril. The two incisor teeth of the right side were then extracted with straight forceps, the gum in front divided with the scalpel, as also the soft covering of the palatine vault, one or two lines beyond the margin of the tumour, and the velum pendulum palati separated from the palate bone. A small saw was now applied to the alveolar process formerly occupied by the first incisor tooth, and the thick part of the bone divided. A very strong pair of bone-nippers, with sharp points, was now applied, and the palatine process, together with the septum narium, divided.

Owing to the necessity of extending the incision beyond the palatine raphe, for the purpose of completely encircling the tumour, this part of the operation consumed more time than is usual. The bone-nippers were next applied to the nasal process of the upper maxilla, then just below the junction of this last with the malar, and the incision extended through the anterior wall of the antrum, just below the infra orbitary foramen, and backwards to the tuberosity of the maxilla. The remaining attachments of soft parts were divided with the scalpel, and a slight blow with a chisel completed the separation of the remaining bony attachment behind, which enabled me to remove the whole mass.

There was little or no hæmorrhage from deep seated parts. The actual cautery was applied to several suspicious points. The only vessel of any importance, which required a ligature, was the labial, which was divided by the incision through the middle of the lip.

The parts were exposed for an hour, when the cavity was filled with lint, and the flap united at the edges by 9 or 10 points of twisted suture. The patient was put to bed, and soon there occurred hæmorrhage from the nose and mouth to rather an alarming extent; but this was arrested by stuffing more lint into the cavity through the mouth, and applying cloths wet with cold water to the cheek.

At 6 o'clock, P. M., I visited the patient, and found her as comfortable as circumstances would permit; pulse pretty good.

R. Gruel, with brandy; and laudanum to procure rest.

19th, 20th, 21st.—Patient has been doing well. The incision through the soft parts has almost entirely healed by the first intention—it has been dressed altogether with cold water. There has been some swelling of the face, which has been reduced by the cold applications. There was some febrile exacerbation on the 19th, which subsided after the bowels were moved by an enema.

Her diet has consisted of beef soup and arrowroot. Laudanum freely given to procure rest and allay pain.

22d, 23d.—Continues to improve. As the weather became cooler, and the cold applications unpleasant, simple serate was substituted.

There has been considerable fœtor from the wound in the mouth. The lint was removed from the cavity on the 22d, and fresh lint wet with sol. chlor. sod. substituted. None of the pins have been removed. The swelling of the cheek has subsided. She takes arrowroot and soup, with a little wine; laudanum to quiet nervous irritation.

24th.—The pins were all removed to-day, and the whole tract of the incision, with the exception of one or two very small points, found to have united very neatly by first intention. Adhesive strips were substituted for the pins, in order to support the parts. The general treatment, and dressing for the inside of the mouth, were continued.

April 7th.—The patient has continued to improve—parts involved in the operation nearly all healed. She takes mush, &c., walks about, speaks with great difficulty and almost unintelligibly.

May 13th.—Jenny has continued to improve in health. The parts on the inside of the mouth are pretty well healed. A thin cartilaginous plate has been formed, like an arch, beneath the soft part of the cheek, which supports them admirably, uniting itself to the palatine process at the line of incision, and preventing the falling in of the cheek!

The opening between the mouth and nose is very much contracted, but not sufficiently to prevent the passage of food into the nose, which she finds rather annoying.

A semi-transparent, reddish, granular mass has been thrown out from the mucous membrane lining the remains of the cavity of the antrum beneath the orbit of the eye, which has given me some uneasiness, lest it should prove a nucleus for the regeneration of the disease. But I am in hopes, from its healthy appearance, that it is only an effort of nature to fill up the remains of the cavity, and promote, as much as possible, the convenience of the patient. The patient's articulation is improving, so that she can be more easily understood when speaking.

June 6th.—I had an opportunity of examining this day the subject of the case above detailed. I find pretty much the same appearance of the parts as when last examined. The parts within the mouth are well cicatrized; the granular mass in the upper part of antrum bears very much the same appearance—it does not completely fill up the cavity. I cannot believe that it is any part of the disease for which she underwent the operation. She has contrived to obviate the inconvenience resulting from the deficiency of the roof of the mouth, by stuffing in cotton. I recommended to her a piece of sponge as a substitute. I have no doubt that the defect might be very much relieved, by an ingeniously contrived gold or silver plate. She masticates very well with the teeth which remain in the maxilla of the left side.

The tumour which was removed by this operation, is sarcomatous; but in some respects, resembling brain, particularly since it has been immersed in spirits. When incised, the surface is smooth, and is similar to the incised surface of brain, which has been hardened in alcohol, interspersed here and there, with minute bony spiculæ.

The subject of the operation has returned to her former occupation (not very laborious) in the country; and from present appearances, may reasonably hope to be remunerated for her fortitude in submitting to it;—and modern surgery may, without much presumption, number the case among its triumphs.

NOTE.—While we sincerely hope our friend may realize his expectations regarding the non-return of the disease, the effects of which he has so skilfully extirpated in this case, we cannot divest ourselves of the apprehension that it is malignant in its character, and may in the end destroy life. Of eleven operations on the jaws, in our practice, there has been a return in every instance where malignancy was clearly determined.—[Ed.]



## ARTICLE XXX.

*A case of Colic, relieved by Balsam Copaiva.* By HENRY GAITHER, M. D., of Oxford, Georgia.

Mr. D. M., a sturdy, well-proportioned Irishman, remarkable for strength and activity, enjoyed almost uninterrupted health up to about his fiftieth year, when he began to suffer some inconvenience from frequent but slight attacks of colic, especially after any error in diet, or during moderate torpor of the bowels, for he was never troubled with such a degree of intestinal inaction as would be called constipation, neither was he subject to diarrhœa. Under this condition of the bowels, almost perfectly healthy as to action, the colic symptoms gradually increased in violence until he had to call in medical aid. The writer, who was the family physician, being sick at that time, a neighboring "Thompsonian" was sent for, whose steam soothed for a while, but whose pungent preparations of pepper and other fiery compounds aggravated the pain. Failing to get relief from these remedies, a physician was called in, under whose treatment he was relieved for a time. On all subsequent attacks I was with him, and by the use of anodynes, cathartics, sinapisms, warm bath, &c., preceded sometimes by venesection, the paroxysms passed off in the course of a few hours. Still slight and frequent twinges would generally recur before many days had elapsed, harrassing the patient and keeping him in constant dread of his frequent torture. The paroxysms which were sometimes excessively violent, came on at irregular periods of from one to three months. During the intervals various remedies were used, being such as were suggested by the conflicting pathological views of the case, to-wit, tonics, derivatives, alteratives, &c., and among the last mercury, which was given until ptyalism was induced, but without any manifest benefit. A year or so after this, when in one of his best intervals, jocund, happy and hopeful, improved in feeling and in flesh, (for his constitution was yet as elastic as a boy's) he fell into temptation, and neither conscience nor consequences restraining, he yielded, and came out worsted. A few days revealed to him the existence and nature of his new malady. He commenced the use of Bals. Copaiva with some unimportant adjuncts, and in two or three weeks was cured of both gonorrhœa and colic, or rather, permanently cured of the former and perfectly relieved of every twinge of the latter, for more than two years. But this may be viewed as a spontaneous change—the

result of nature's efforts—as an instance of the *post hoc* and not of the *propter hoc*. Let the progress of the case decide the doubt. After this long exemption, the symptoms gradually returned with increasing violence, until they became as distressing as at any former time; when under my advice, he resumed the use of the Balsam, and continuing as before, a like period of immunity ensued; and he is now so fully assured of the benefits derived therefrom, that, without being urged to it by a medical attendant, he resumes the remedy on the slightest indications of his returning malady, and always with long, but varying periods of exemption, and has now remained for several years secure from violent seizures.

Now, what is the nature of this case? what is the disease? where its seat? and what its pathology? It would consume too much time and space, tire my unaccustomed hand, and be unacceptable to the reader, to show or attempt to prove that it is not neuralgic, nor from biliary calculi, &c., &c. But is it bilious colic? I think not. It is true the patient had a liver, as all of our patients have, and it is a fine thing, a matter to be rejoiced over, that if we get a patient we know he has a liver. This hydrargyric target, scape-goat of the viscera, great hiding place of all manner of ills and errors,—yes, this grand, magnificent organ being where it is, and doing what it does, has relieved many an Æsculapian from a world of embarrassment, and it does it so easily, so rationally, and so invisibly, that there is neither doubt of the truth, nor appeal from the decision. The thing is done on this wise: if after due searchings and explorations we fail to find the disease elsewhere, we know, as a matter of course, it must be in the liver. And I believe it is an admitted fact among the fraternity, that it is always right to find a disease before we cure it, on the same high and philosophic ground, that it is right to catch a hare before we cook him.

But dropping bagatelle, I proceed to the investigation. The liver has been accused of a great many sins that it never committed; but, like other organs, it may sometimes be at fault—it may be disordered in structure or function, and when so, its secretion may be redundant, deficient or vitiated. Evidence of these or other morbid conditions should appear, before we locate disease there. It is not enough that the patient is sick, and we know not what else ails him, to justify us in pronouncing it “liver disease,” any more than it is, to pronounce every fever congestive that terminates fatally. It is not enough that we can puke or purge out bile, for it is no more

evidence of diseased liver, that bile flows copiously under certain excitants in the stomach or bowels, whether food or physic, than that the salivary glands are diseased because they secrete copiously when excited. I have admitted that the liver may be at fault. Well, suppose it is diseased and pours out an acrid secretion, the intestines, though in a healthy condition, are fretted by it, and resent the morbid influx, by taking on a dysenteric, diarrhœal or colical action, this sometimes occurs; but, by the way, these *effects* are not sufficient evidence that the primary disease is seated in the liver. But on the contrary, suppose the intestines are out of order, (say the mucous membrane,) and the liver pours into them its accustomed healthy secretion, is it any more strange that they should resent it, by showing colic or something else, than that healthy tears should smart an inflamed eye, or healthy urine an inflamed urethra? Before proceeding further, however, that I may not be misunderstood, I would say, whatever organ may be primarily affected, in any case, the contiguous ones, or those more intimately associated in office or sympathy, and even the system at large, may become more or less involved in the progress of the disease. But in the case before us there were no symptoms indicating extensive diseased action, and I believe the primary, the chief, and perhaps the only disease, was a morbid irritability of the mucous membrane of the intestinal canal, confined probably to the colon, evidently there was no liver disease, or it came without a single one of its numerous retinue; there was no bilious tint of skin or eyes, no enlargement, hardness, or tenderness of the epigastric or hypochondriac regions, no pain in the shoulder or other remote part; he could lie on either side or back with equal comfort; no cough, no melancholy, and indeed, not to dwell longer on the symptoms, there was no evidence at all of hepatic derangement, and although his digestion continued good, he had to be careful as to his diet, more in reference to the effects on the colon produced by the residuum of digestion, than from the impression made during that process on the stomach and small intestines. That the stomach, liver and the other associate organs, more immediately concerned in digestion, were in a healthy state, is further rendered probable by his resiliency from the debility induced by severe attacks, and his keeping in a healthy fulness of habit, under the almost constant harrassings of disease. And again, these views, as to the seat and nature of the disease, are further corroborated by the effects of remedies, particularly those like the Balsam, which have



long had an established reputation in affections of the mucous membranes.

I claim to have made no discovery in this case; but was led, as before stated, to the use of an old remedy, in a disease which had not before been treated by it, so far as I know; although administered frequently (if my pathology is correct,) in diseases of a kindred nature. I do not pretend to say, for I do not believe it is adapted to any large proportion of colic cases, but there are doubtless those occasionally occurring in every one's practice, in which bals. copaiva and similar remedies would be found useful.

I am aware that I have not *positively* established the truth of my views or the correctness of my position, but if the one is correct and the other untenable, I nevertheless flatter myself, that the *facts* will interest the medical public.

---

ARTICLE XXXI.

*Febris Typhoides, as at present prevailing in the Alms House and Prison Hospitals of New-York.* By CHAS. T. QUINTARD, M. D., of Athens, Clarke county, Ga., late Assistant Physician to the Alms House and Prison Hospitals of the City and County of N. York.

The New-York Journals have of late been filled with accounts of the rapid spread of the Ship and Typhoid Fever, in those parts of the city where poverty, vice, and filth encourage the development of disease. The hospitals are crowded: at the Quarantine there are more cases than have ever before been known; at the New-York hospital it is the same; while at the Bellevue Institution there are so many cases that temporary buildings have been erected for the accommodation of the convalescing patients. The number of patients treated in Bellevue, from January, 1846 to January, 1847, was 4132; the deaths, 521 or 12 $\frac{7}{8}$  per cent.

|                              | Males. | Females. | Total. | Foreigners. | Natives. |
|------------------------------|--------|----------|--------|-------------|----------|
| Remaining January 1st, 1846, | 226    | 307      | 532    | 288         | 244      |
| Admitted during the year,... | 1906   | 1691     | 3600   | 3000        | 600      |
| Total, ....                  | 2132   | 2001     | 4132   | 3288        | 844      |
| Discharged and died, .....   | 1833   | 1894     | 3627   | 1880        | 747      |
| Remaining January 1st, 1847, | 299    | 206      | 505    | 408         | 97       |

## ADMISSIONS.

|                           |      |                   |      |
|---------------------------|------|-------------------|------|
| From England,.....        | 160  | In January,.....  | 205  |
| " Ireland,.....           | 2202 | " February,.....  | 237  |
| " Scotland,.....          | 85   | " March,.....     | 267  |
| " Germany,.....           | 470  | " April,.....     | 264  |
| " United States,.....     | 154  | " May,.....       | 294  |
| " State of New-York,..... | 446  | " June,.....      | 308  |
| " Other Countries,.....   | 83   | " July,.....      | 355  |
|                           |      | " August,.....    | 326  |
| Total,.....               | 3600 | " September,..... | 389  |
|                           |      | " October,.....   | 332  |
|                           |      | " November,.....  | 281  |
|                           |      | " December,.....  | 342  |
|                           |      | Total,.....       | 3600 |

Of the whole number of deaths that occurred during the year, 31 were from Acute Dysentery; 24 of Congestion of the Brain; 20 of Puerperal Peritonitis; 168 of Phthisis Pulmonalis, and 58 of Typhoid fever—or 301 deaths out of the total 521.

|                 | Discharged. | Died. |
|-----------------|-------------|-------|
| January,.....   | 245         | 30    |
| February,.....  | 204         | 31    |
| March,.....     | 243         | 46    |
| April,.....     | 261         | 60    |
| May,.....       | 198         | 44    |
| June,.....      | 294         | 50    |
| July,.....      | 267         | 50    |
| August,.....    | 250         | 47    |
| September,..... | 303         | 40    |
| October,.....   | 352         | 49    |
| November,.....  | 203         | 36    |
| December,.....  | 286         | 38    |
|                 | 3106        | 521   |

The Resident Physician, in his report, rendered January, 1847, states "that a large number of ship or Typhoid Fever cases have been admitted, many of them in a dying condition, and while quite a number have died; still the proportion of recoveries has been great and the fever has not generally been marked by the contagious character usually assigned to it." In consequence of the state of some parts of Europe, Ireland in particular, emigration increased so rapidly towards the spring, that the cases of Typhoid fever exceeded the amount of all the other diseases in the Institution, and while the number of deaths from Jan. 1846 to Jan. 1847 amounted to 58, there have been half that number dying weekly of this disease. The contagious character of the disease is well marked, and this we presume comes from the fact that a great number of passengers are

crowded into the ship-holds, from which the malaria generates a poison of greater intensity and of a decidedly contagious character. At one time it was difficult to obtain nurses willing to superintend the wards, and when we remember that the nurses at the Bellevue Institution, are taken from among the *convicts* at Blackwell's Island, we cease to be astonished at the fatality of the disease. Several nurses and orderlies died, and of the attending physicians, Drs. Stone, Reilay and Van Buren contracted the disease. The latter gentleman fell a victim to it. At the Bloomingdale Hospital, three of the physicians have likewise died, among whom was Dr. Farrer of Virginia. So soon as Dr. F. was taken, he was removed from the hospital to the city, and attended by Professors Revere and Pattison. Prof. Revere contracted the disease, and he too fell in the midst of his usefulness. In the lower part of the city, where a large number of emigrant boarding houses are kept, the disease has been very abundant, and has spread to the neighboring streets of the city. Of its nature or character we are unable to speak. That this fever is contagious we are assured of by the fact that it can be communicated by vessels being in the neighborhood of the patient, or by passing through the wards where it exist, as well as by breathing constantly the atmosphere by which they are surrounded. Its action is of course modified by the peculiarities of the constitution, of those exposed to the atmosphere, depraved by the matter of the miasm on ship board, but the poison appears to be as contagious from a mild case as from a very severe one, and the disease is as readily contracted.

---

## PART II.—REVIEWS AND EXTRACTS.

### ARTICLE XXXII.

*The American Journal of the Medical Sciences*, for April, 1847.  
Edited by ISAAC HAYS, M. D., &c., &c. Lea and Blanchard,  
Publishers: Philadelphia.

Of the twenty Medical Periodicals of our country, this one has the best claims to the title it has assumed. *American* it is by seniority, by its size, and by its worth. Indeed, if we are not mistaken in our estimation of it, this Journal merits a more extended and significant appellation. Since the lamented death of Dr. James Johnson, the able and distinguished editor of the *Medico-Chirurgical Review*; and



the more lamentable fall of Dr. Forbes, of the British and Foreign Medical Review, to a recommendation of homœopaths, hydropathists, &c., of the day, we have no hesitation to pronounce the American Journal of the Medical Sciences, to be by far the most valuable now published in the world. The Edinburgh Medical and Surgical Journal is not to be compared to it. Of the same date, and both Quarterly, the Edinburgh has thirteen original articles, and but twelve selected; while the American numbers twenty-five in one department, and about one hundred in the other. The Dublin Quarterly Journal of Medical Science we prize most of those now published in Europe; but still we deem it inferior in the character and value of its communications, as also in its reviews and selections, to the one now under consideration. We know of no French or German, and still less Italian or Spanish medical periodical that we would exchange for the American.

This is the only medical *Quarterly* of the United States. Published originally twenty-nine years ago, and subjected to the control of different editors, it has always preserved the highest character among medical practitioners in every State of our wide spread Union. And notwithstanding the ability with which other similar works have been conducted and are now managed, it still retains undiminished its enviable reputation.

The first part of each number is devoted to original communications, memoirs and cases; then follow its review department and bibliographical notices; next a quarterly summary of the improvements and discoveries in the medical sciences; and lastly, American intelligence. Each No. contains about 256 pages, but frequently much more. Connected with the Journal is another publication, called the Medical News and Library, issued monthly, containing 20 pages of the re-publication of some foreign standard work of the profession, and eight pages of recent medical intelligence. This is as an *avant-courier* of the larger and more important Journal; and both are furnished to subscribers for \$5.00 per annum, invariably in advance.

The April No. of the American Journal of the Medical Sciences, although received a month or so ago, contains so much interesting matter in the original department, that we propose at present to condense from it such intelligence as no doubt will be profitable to our readers.

The first article in it is from *John Forsyth Meigs, M. D.*, Lecturer

on Obstetrics, and Diseases of Children, in the Philadelphia Medical Association, &c., and is entitled, "*History of seven cases of Pseudo-membranous Laryngitis, or True Croup; with remarks on the treatment, and on the distinction between it and the other laryngeal affections of children.*" The father of the writer of this communication was graduated in Franklin College of this State in 1809, and having taken his medical degree in the University of Pennsylvania in 1817, commenced the Practice of Medicine in Augusta. He subsequently moved to Philadelphia, where he soon after married, and is now the distinguished Professor of Obstetrics, &c., in the Jefferson Medical College. The son seems to be following closely the professional footsteps of his illustrious father, and the name of Meigs promises to be long associated with the profession.

After claiming the attention of the profession, if for no other reason, on account of the fatality of croup, Dr. Meigs, Jun., proceeds to a minute and no doubt faithful narration of his cases. We give the first:

CASE I. D——, girl aged 3 years. Called first on the night of January 1st, 1845. Dr. Godon, of this city, was in attendance when I arrived, and we attended the case together. The child had had cough for three days, gradually increasing in violence and frequency, and changing from a dry hack to the peculiar shrill cough of croup. The parents were not at all alarmed until the evening I was called upon, at which time the case first assumed the features of croup.

When I arrived the case appeared to be one of mild croup. The respiration was not stridulous, except during a forced inspiration, or just before and after coughing. The cough was loud, frequent and characteristic, the voice very hoarse. The temper was scarcely changed, and the inflammatory symptoms very moderate, showing that the local disease had made but little impression on the constitution as yet.

On account of the gradual approach of the attack, and the hoarseness of the voice, it was agreed upon by us to treat the case actively, as we feared it would prove to be membranous croup. The child was bled to the amount of five ounces from the arm: it was put in a warm bath, and an emetic administered.

The next day there was no decided improvement, and a number of leeches were applied to the throat. From this time to the ninth day, when the child died in a state of asphyxia, the treatment consisted in the employment of emetics of alum, of large doses of calomel with Dover's powder, of decoction of Seneka, and in the application of a blister over the larynx and trachea.

On the sixth day a decided amelioration occurred. This improvement followed the use of an emetic of alum, which had been preceded by considerable doses of calomel. The action of the emetic

brought away a large quantity of very viscid glairy phlegm, intermingled with portions of membranous looking matter, which we believed to be pseudo-membrane, enveloped in recently exuded fibrine. She expectorated for some time after this a good deal of the same kind of substance. It may be well to remark, however, that though the breathing and general condition of the patient improved at this time, the voice remained very weak and hoarse, and the cough retained its smothered sound. The case soon resumed its course, and notwithstanding resort was had to the same means, death occurred in a shape of the most distressing asphyxia.

At a *post-mortem examination*, the larynx and a few inches of the trachea were found occupied by a false membrane of moderate thickness and consistency, beneath which the mucous membrane was inflamed and reddened. The parts about the rima glottidis were swelled and thickened, so as to have contracted considerably the size of the orifice. This contraction was independent of the pseudo-membrane, and from the appearance of the parts we were convinced that it was the result of a chronic inflammation, dating from some time previous to the attack of croup. As the child had just recovered from a severe and long-continued hooping-cough, we felt satisfied that the contraction of the orifice had been caused by inflammation developed in the progress of that disease; and moreover, we could not but think that this complication was a chief cause of the death of the child, by preventing the ready expulsion of the contents of the larynx, after they had been softened by the action of our remedies.

Of the seven cases two proved fatal.

We find the following remarks made on the different forms of laryngeal affections in children:

Before passing to the subject of the treatment employed in the above cases, we are desirous of making a few observations upon the divisions made by different authorities, of the laryngeal affections of children. We are prompted to do this, by the hope of attracting the attention of our medical brethren in this country to the necessity of making a correct distinction in their diagnosis of these different affections.

After a careful study of some of the highest authorities on these points, we are induced to believe that the descriptions given by MM. Barthez et Rilliet, in their work on diseases of children, are the most accurate. These gentlemen describe first, pseudo-membranous laryngitis, of which the cases reported in this paper are instances. They next consider spasmodic laryngitis, the same as the stridulous laryngitis of Guersent and Valleix. This disorder is very common throughout the United States, and is the one to which the term croup is familiarly applied. It is the disease which commonly attacks children previously in good health, *suddenly*, during the night; which is generally cured by an emetic; and which seldom lasts more than a



few hours, or one or two days. It does not come on slowly and insiduously like pseudo-membranous laryngitis; it is not accompanied with exudation of fibrine, and lastly it is a disease of really little, though apparently of very great danger. It is not the laryngismus stridulus of the English authors, though the two are classed under the same head by Williams, in *Tweedie's Library of Practical Medicine*, and by Dr. Condie in his work on Diseases of Children.

Both MM. Rilliet et Barthez and M. Valleix, are very careful in drawing the distinction between the two diseases, the pseudo-membranous laryngitis or true croup, and spasmodic laryngitis or false croup. Indeed the difference is so marked, that we are surprised it is not made out by all recent writers. Those who fail to make the distinction, seem to think that both diseases are the same in the commencement; that they are characterized by the same pathological features in the early stages, and that after differences depend on fortuitous circumstances of age, of epidemic influence, of treatment, &c.; whereas they are two widely different and distinct diseases, presenting a different array of symptoms, running a different course, and requiring a different treatment; one, so fatal as to have led some to deem it incurable; the other, very seldom leading to a fatal termination. In one, the chief pathological element is spasm, determined by a very moderate degree of inflammatory affection of the larynx in most cases; in the other, there is violent inflammation of the mucous membrane of the larynx, trachea and even bronchia, with effusion of fibrine and consequent formation of false membranes.

The peculiarity in the treatment of croup offered by Dr. Meigs is the *emetic* property of alum. This, he says, was first used in Philadelphia, by his father. The dose is a tea-spoonful of the finely pulverized sulphate of alumina mixed with honey, syrup, or molasses, and repeated every ten to twenty minutes, until full emesis is produced. One dose, however, is generally sufficient. The reader will recollect how powdered alum is prized by Velpeau for common sore-throat. No doubt there is something specific in it in anginose affections. He also alludes to the fact of the recommendation of the *turpeth mineral*, the sub-sulphate, or yellow sulphate of mercury, by Dr. Hubbard of Maine. He gave it one case, (three grains diffused in syrup,) which produced free emesis in a few minutes, followed by relief, but the child subsequently died from the violence of the attack.

This is a highly creditable article for a young man of eight years standing in his profession.

The next is a deeply interesting article on the *poisonous properties of the Sulphate of Quinine*, by Wm. O. Baldwin, M. D., of Montgomery, Alabama.

So much has been published in our Journal on the subject of this heroic article of the modern *materia medica*, and the opinions expressed concurred in so generally by the profession in this section of our country at least, that individually we have nothing to add at present. For it will be perceived that though Dr. B. entitles his article, "Observations on the *poisonous* properties of the Sulph. Quinine," he entertains and publishes the same views respecting its proper dose, mode of administration, &c., which we have for some time maintained and taught. It is proposed then to quote this article without comment, where it cannot be condensed.

Everything calculated to throw additional light upon the *modus operandi* of a remedy which occupies such a conspicuous position in the therapeutics of the age, as does the sulphate of quinine, must be received with some degree of interest by the medical profession at large. Under this conviction I propose to narrate some facts and experiments relative to the nature of quinine *as a poison*. Though an unfortunate one, it may yet be stated as a fact, that in our medical periodicals we much oftener meet with reports of cases showing the successful application of particular remedies, or modes of treatment, than such as illustrate their pernicious influence or misapplication. Through this means, however, we have in a few instances been advised of the baneful effects of quinine in producing deafness, amaurosis, hæmaturia, violent gastralgia, sudden prostration, delirium, epilepsy, palsy, &c., and in a few instances *death* is reported to have occurred, under circumstances so obvious as to leave no doubt of its being the result of the poisonous operation of quinine. Yet these have been so completely obscured by the reports of those individuals who declare their entire conviction of its *harmlessness*, under all circumstances, and when given in almost any quantity, that the former seems to have made but little impression upon the mind of the profession in regard to its dangers. In none of our systematic works do we find the subject treated of with anything like gravity. In Orfila, and even in Christison's work on Poisons, where the noxious properties of many very simple substances (and among them *common table salt*) are dwelt upon at length, quinine is not mentioned as a poison, nor are any of the preparations of cinchona.

A case is then given of a negro girl about six years of age, to whom her master gave 8 grs. of quinine in the course of three hours. She was laboring under remittent fever, and during the previous treatment of the case, had taken repeated doses of the sulphate, but in smaller quantities.       \*               \*               \*               \*               \*               \*

Shortly after he gave her the last dose her skin became dry again, succeeded by restlessness. About 6 o'clock she had a convul-

sion. After this he noticed that the pupils of her eyes were dilated, and soon discovered she was *totally blind*. When asked if she knew her mother, and other persons who were placed before her in a bright light, her eyes would wander about—she apparently endeavoring to fix them on some object—and then she would reply “I can’t see them.” The *dilatation of the pupils, blindness, restlessness, convulsions, &c.*, continued until 8 o’clock, when she died. The convulsions were described by Mr. E. as being of a most violent character, but notwithstanding she retained in the intervals perfect possession of her mental faculties, and an unusual degree of pertness for children of her age.

I was not prepared to make a thorough post-mortem examination, and therefore made a partial one, only of the stomach and bowels. Found considerable vascularity in portions of the small intestines and stomach, the former containing secretions of a yellowish and greenish substance, intimately blended with mucus—no worms. Pupils enormously dilated.

A review of this case leaves no doubt, upon my mind, of the direct agency of the quinine in producing death. The quantity given immediately before death (grs. 8), would not of itself (I am disposed to think) have produced the fatal result, separate from the agency of that which had been given previously, but at the time these last portions were given, it must be remembered that the system was still charged with the quinine to some extent, for up to 4 o’clock that morning it had been regularly introduced into the stomach, at intervals, for nearly two days. The accession of fever which should have taken place on the 4th was prevented. Now it is very sure that the patient either died from the effects of the quinine, or that the paroxysm of fever which had been arrested or suspended on the 4th, came on on the 5th and killed her. The latter could not have been the case, for we find her an hour or two before she commenced taking the quinine (the second time) in a warm, free and diffused perspiration. The most conclusive evidence, however, to my mind, that the quinine *did* kill the patient, is the characteristic train of symptoms which immediately followed its administration, and preceded death: the *extreme restlessness, dilatation of the pupils, blindness and convulsions*. The exacerbating feature of the disease had been broken up, after which there was nothing to forbid the hope of her recovery, and, apart from the effects of the quinine, there was certainly nothing in her condition to account for her death *at that time*.

\* \* \* \* \*

*Symptoms* which followed the ingestion of large doses of quinine into the stomach of dogs:—*restlessness* generally preceded all other symptoms, as was indicated by the animal changing its position often, and constantly moving from place to place. *Vomiting*, or, in those cases where the œsophagus was tied, efforts to vomit succeeded. *Purging* was noticed occasionally, but in no instance except where the medicine was taken by the stomach. Then came on *muscular*



*agitation, or tremulous movements of the body and extremities, with a constant motion of the head, resembling somewhat paralysis agitans.* In attempting to walk, the dog would totter from side to side and fall, or if he maintained his feet would walk in a direction different from the one which he seemed to desire. When under the full operation of the poison, the power of locomotion, or even the power of standing in the erect position was lost altogether, the extremities apparently *completely paralyzed*. This state was accompanied with more or less *excitement of the vascular system*; the pulse increasing in frequency and rising from 110 to 160, and in one instance even as high as 240 per minute. *Great oppression of the breathing* was present, and sometimes *frothing at the mouth*. The *dyspnœa* in all instances was excessive, sometimes panting, at others *slow and laboured*, resembling in a most striking manner an acute attack of asthma; countenance expressive of great distress and anxiety. The *pupils of the eyes were invariably dilated*, and generally to an enormous extent, leaving but a small ring of the iris perceptible, and *vision*, as well as could be judged, *was entirely lost*. *Convulsions* were observed in every case (except one), which was watched to its termination, where the dose given was sufficient to produce death, and in one or two instances where the medicine failed to produce this result. *Furious delirium* was present in one case, as was manifested by the dog barking and biting at every thing about him. Sometimes a *profound coma* would ensue, accompanied with slight *muscular agitation, slow and heavy breathing*, terminating in death in a very few minutes after the poison had been taken, and in a few instances the subject seemed as if stunned by some sudden and powerful blow or violent fit of apoplexy. This latter effect, however, was only observed when it was given to young dogs (half grown and under) through the jugular vein or peritoneum. Its effects upon puppies seemed to be *proportionately* much greater than upon dogs fully grown.

The time required to produce death varied very greatly with the quantity given and the age of the subject, as well as the mode and manner of its administration, and in some instances it varied considerably when the dose, mode, and all other circumstances of its administration were supposed to be equal; for whilst in some instances fifteen or twenty grains produced the uniform and peculiar train of toxical symptoms, succeeded by death in a very short time; in other instances it required these quantities doubled and repeated until 120 grains had been taken, and a much longer time to produce the same results. This fact is in accordance with my experience relative to its remedial action upon the human subject, showing that it is governed more, perhaps, in its *modus operandi* by inherent idiosyncrasies, or created predispositions, than any other remedy. The modes of giving it adopted, were by the stomach, the cavity of the abdomen, and by the jugular vein. When given by the stomach it produced vomiting, and was thrown back generally before a suf-

sufficient amount to produce death could be absorbed. By dissolving and largely diluting it with water, a sufficient quantity was absorbed to produce death, in this manner, in one instance. In almost all of the experiments with it by the stomach, however, the *œsophagus* was ligatured. When dissolved and given by the *stomach* its first effects were observable in about twenty minutes, sometimes shorter or longer, and death resulted in from one to thirty-six hours, usually in four or six. An empty stomach facilitated its operation greatly. When injected into the *peritoneum* in full doses (40 grs.) its effects were appreciable in from four to six minutes, and death occurred in from thirteen to thirty minutes. When injected into the *jugular* vein (in giving it by this mode great care was taken to prevent the admission of air), its first effects were manifest in a space of time so short as to be almost inappreciable; not more than a few seconds after the nozzle of the syringe was withdrawn, and death occurred in one or two minutes. In all instances, except one, the quinine was dissolved in water by the addition of sulphuric or other acid in quantities barely sufficient for this purpose.

When the experiment went far enough to produce amaurosis, short of death, the vision was regained after a time. In one instance the dog remained *totally blind* for two weeks, and afterwards regained his vision slowly. This is also a feature in the second case reported in the commencement of this article. The man regained a very useful degree of vision after a short time. From these, as well as other cases of the kind reported, it would seem that amaurosis from this cause is not likely to be permanent.

Though it operated much more promptly when injected into a vein or the peritoneum, yet I did not observe that it operated with more power or force: that is, I did not discover that a given quantity administered in this way would produce death more certainly than when given on an empty stomach. 28 grains injected into the cavity of the abdomen in one instance, and 20 grains injected into the jugular vein in another, failed to produce death, yet these quantities *did* produce death in other instances, as well when given by the *stomach*, as by these modes.

The *post-mortem* appearances were equally uniform with the symptoms before death. The most prominent and characteristic appearances were the *dark, fluid and defibrinated* condition of the blood, and the *congested* state of the parenchyma of the *lungs*, resembling very much *red hepatization*. The vessels of the membranes of the brain were engorged, so also were the liver and kidneys in a few instances. The stomach and bowels were vascular and highly injected in patches. The membranes of the spinal cord were more or less vascular and, in one instance, a semi-fluid coagulum of blood was found in the upper half of the *theca vertebralis*. This was probably owing to the subject being very young, and the convulsions being more violent and frequent than in any other instance.

Thus it seems clear that quinine is a *poison*, and one which may be

made *directly fatal to life*, and if these experiments upon the dog, *in themselves*, are not conclusive of that fact, which the concurrent testimony of toxicologists would justify us in believing, they at least become so when it is remembered that the symptoms which its exhibition gave rise to, are not only strongly corroborated by, but were almost identically the same with those observed in the human subject, in the few instances where poisoning from this substance is known to have been produced. There is not a symptom noticed in these experiments which has not, at one time or other, been observed in its operation upon the human subject, and the two cases of poisoning in the human subject reported in the commencement of this article, where the same striking and peculiar assemblage of symptoms which followed its administration, were so completely identical with those observed in the dog, most clearly establish the fact that the manifestations of its *poisonous operation*, at least upon the dog, are identical with those observed in the human subject, or at any rate do not differ more than they do in different instances on "man and man."

Its operation as a poison, as well as a remedy, is certainly peculiar, and it seems difficult to assign it to any particular class of poisons, differing in some respects from all of them. It appears to resemble in its action, more closely than any other, those of the "*second class*" of Orfila, or the class of "narcotic poisons." It does not seem to possess any hypnotic properties; in this it differs from most of the substances included under this head. I do not mean to touch the much agitated question of the mode of its remedial operation, but desire to speak of its poisonous action only; and, on this head will only add, farther, that its operation seems to be principally upon the nervous system, as is clearly demonstrated in the derangement of the senses of vision and hearing, and respiratory functions, as also in the general muscular agitation, convulsions, &c. As it has been detected in the urine there can be no doubt but that it enters and mixes with the circulating masses of the body, and through this means exerts a *direct* influence upon the nervous system, which, as we have seen, is *eminently* excitant when given in quantities calculated to destroy life.

As yet I am aware of no *antidote* which will, with any certainty, negative the injurious effects of quinine. I have given the sulphate of morphine to patients rendered very restless and uncomfortable from a high state of *quininism* having been induced, but cannot speak with any confidence as to its effects. I have not known it to produce an immediate alteration in the state of the patient's feelings, but have witnessed an improvement in the course of a few hours, and in no case do I remember to have seen the patient get worse under such circumstances; but how far this may have been dependent upon the suspension, or partial withdrawal of the quinine (which generally takes place under such circumstances), and how far upon the morphine, it is difficult to say. This, however, at best, can only



be a partial antidote, palliating the effects of the poison, and of course can in no wise alter its medicinal, poisonous or chemical qualities or constitution. And, did we possess an agent of the kind, whose properties would render speedily inert those of the quinine, it would avail us but little; for, it is not a substance of that character which would be likely to be administered with the wilful intention of destroying life, and an antidote will, generally, only be wanted when the physician fines he *has pushed his remedy too far*, and its injurious effects are already being manifested, and, in that case, the medicine has already passed the limits where an agent of the kind could reach it.

As it is altogether likely that quinine is absorbed, and enters into combination with the circulating fluids of the body, and in all probability produces its impression upon the system in this way, its operation is thus a *remote* one, and the means adopted to prevent or relieve its injurious effects should be such as are found available in combating the poisonous impressions of other substances, supposed to act through the same medium. Thus, if symptoms arise during the administration of quinine calculated to create alarm, or to excite suspicions of its poisonous influence, it would be well to premise all treatment by the administration of a full and prompt emetic, in order to free the stomach of any remaining portions, which may not have been absorbed. The next step, then, should be to eliminate as rapidly as possible, that portion which has reached and mingles with the fluids of the body, and for this purpose, it has been recommended in other instances of an analogous character, to *augment the natural secretions of the body*.

This mode of treatment, which is based altogether upon the inference that the poison is absorbed and enters the circulation, and recommended as applicable or efficient only to poisoning from substances deemed to act in this way, seems to be a most reasonable one. I have certainly never witnessed or heard of any injurious, or seriously unpleasant effects from quinine, when the functions of the skin and kidneys were being actively performed during its influence—especially the former. For this purpose, the copious administration of warm diluent drinks, and hot pediluvia, or warm bath, would seem advisable. When the state of the pulse is such as to justify it, blood-letting, it would seem, is another channel through which the quinine may be abstracted from the system, not only by freeing the system of so much as may be contained in the quantity of blood actually drawn, but as assisting also in promoting the secretions of the skin and kidneys.

I am of opinion, that its poisonous effects may generally, if not always, be avoided by proper attention to the mode of its administration. A very common mode of administering it, and one very much insisted upon by patients generally, on account of its disagreeable taste in any other way, is in the form of pills. And, it is a practice with apothecaries, and with physicians who are in the habit of dispensing their own medicines, to keep a quantity of pills constantly

on hand. These, when made from a mass, formed by the addition of gum arabic, or common paste, get very hard before they are used, and when given under such circumstances, I have known them to pass through the bowels *entirely undissolved*. And, when combined with substances calculated to keep them soft, or even when prepared as administered, they may, and no doubt do occasionally become entangled or enveloped in flakes of mucus or other contents of the stomach and bowels, and thus pass off undissolved, and without effect, or they may meet with some obstruction in the bowels, and be *retained*. When this is the case—that the medicine is not dissolved, or absorbed regularly, nor yet does not escape from the bowels, from some cause or other, and still being introduced into the system at irregular intervals—a large quantity in this way may collect, until suddenly meeting with a solvent, (as first supposed by Briquet,) its whole force is spent upon the system at once, and it thus becomes the cause of serious mischief, when, if the same quantity had been given in such a way as to insure its timely absorption, such a result would not have happened. Of all the forms of giving it that of the pill seems to me to be the most decidedly objectionable, and should never be adopted in cases of much importance, where it can be avoided. Another very common mode of giving it is by suspending it in syrup, mucilage or water. This is certainly less objectionable than that of the pill, though not equal to that of the *solution*, made by the addition of some acid in quantities barely sufficient to dissolve it. I prefer sulphuric acid to any other. This mode of giving it has been recommended by Briquet, on account of its safety. In my estimation, it possesses a most decided preference over every other mode of administering it, and is the only one from which we can with certainty expect the timely and full effect of the medicine.

When the stomach is in a condition to bear it, its absorption and activity can be greatly facilitated by *largely diluting* it with warm water. When dissolved and diluted in this way, even when given in what may be termed “heroic doses,” provided the quantity to be taken is divided and given at intervals of one, two or three hours, its deleterious effects may always be avoided *and the remedy persisted in with safety* in the absence of any manifestation of its influence, which we should never feel safe in doing when giving the “insoluble sulphate,” whether in the form of pills or powders; for, in the former case we will always be advised of its unfavorable influence early enough for a timely withdrawal or modification of the dose. When given in this way, a given quantity seems to produce a greater effect and in a much shorter time, than even a larger quantity when prescribed in either of the other forms; so that besides being a much safer mode it is a more economical one, both as regards time and medicine; and, the reason seems entirely obvious, for by dissolving and diluting it largely in this way, besides being *dissolved ready for the absorbents*, it is brought in contact with a much larger absorbing surface, and many particles which otherwise might lodge about the

contents of the alimentary canal and thus pass off with them, in a state of solution would readily be taken up and appropriated by these vessels.

This mode of giving quinine cannot be urged too strongly, for besides being a *saving* of a valuable and costly drug, and a preventive of its poisonous effects, it will be found of great assistance in prescribing it generally. In cases requiring much delicacy and discrimination in their management, and where the propriety of the prescription is a matter of debate with the physician himself, and he wishes to be made sensible of the effect of the first dose of his remedy, in order to determine upon its continuance, it becomes a matter of great moment that the medicine should be administered in that form in which it will be most certainly and speedily appropriated by the system, and its operation made manifest to the physician. \*

\* \* \* \* \*

In a practice of nearly ten years in the South, the greater part of that time I have employed the sulphate of quinine, as a principal remedial agent, not only in *Southern fevers*, but in *Southern diseases* generally. Accustomed as I have been to witness the most satisfactory results from its exhibition, and familiarized as I *thought* I was with the minutest impression which it was capable of making upon the animal economy, I was prepared to believe every report in its favour, and had almost fallen into what I fear is becoming to be a popular error—that, “if it does no good, it will do no harm.” I say this much by way of showing that I entertained no prejudice to it as a remedy, or anxiety, or even willingness, that it should be found to possess properties which might tend somewhat to circumscribe its useful application. On the contrary, I entertained a fondness for it, not equalled by my attachment to any other remedy. And, though occasionally my enthusiasm in regard to its virtues was somewhat abated, and my confidence in its inodiousness was somewhat equivocal, as it failed to produce the results anticipated, or as some unlooked-for symptoms were developed under its administration and influence soon farther experience would restore my former admiration of its sanative powers, and dispel all fears of the probability of its having exerted an injurious influence: attributing its failure to meet the indications which it was designed to fulfil to negligence in its administration on the part of the nurse, and the unlooked-for symptoms which occurred under its operation as an awkward or anomalous manifestation of the disease itself.

Notwithstanding this acknowledged partiality for it, I have never administered it in the enormous doses prescribed by those who boast of having given their thirty grains, repeated every half hour until 240 grains were introduced into the system, or their several ounces in the treatment of one case of fever. I have very rarely given more than ten grains at a single dose. My usual mode having been to give from four to six grains, and repeat at intervals of two, three or four hours, until 24 or 36 grains had been introduced into the system (in adults). Occasionally I have given it in larger doses, but



these cases have been extremely rare, believing that the quantities specified above, given in one intermission or remission at the proper periods, and aided by suitable auxiliaries, could accomplish, ordinarily, all that the remedy was capable of, and these enormous doses, to say the least of them, unnecessary. Sometimes, owing to want of time, I have given from 20 to 24 grains at one dose, but in such cases have never repeated it in the same dose.

Second to none other, quinine must ever hold the first rank in our materia medica, in the treatment of Southern diseases. I am accustomed to witness its peculiar and almost wonderful influence in arresting certain forms of diseases, but yet that it has gone far beyond its proper bounds, and is now being used too recklessly and indiscriminately, I feel most fully persuaded, and that it may be directly and fatally poisonous I am entirely convinced.

\* \* \* \* \*

From all that I can gather, I am disposed to think from fifty to eighty grains of a pure article of quinine, given in solution at one dose, will produce death nine times out of ten, in healthy adults, and occasionally even smaller quantities. How far its operation may be modified by morbid action is a matter for consideration at the bedside.

Dr. Baldwin concludes this valuable paper, which should be read by every practitioner of medicine, by relating a case wherein 36 grs. of quinine taken by an adult in two hours, produced exhilarating effects resembling those of the protoxide of nitrogen.

Montgomery, Ala., is remarkably blessed with a number of highly scientific physicians. There are no less than three regular contributors there to the American Journal of the Medical Sciences—men of decided abilities and great professional zeal. And besides these, (Drs. Baldwin, Sims and Boling,) we have a personal acquaintance of several others in this small town, now, however, become the capitol of the State, who enjoy distinguished reputation for skill in the healing art. The 3d Art. in this No. of the Journal, is by *J. Marion Sims, M. D.*, and is the honest narration of a case of tumor of the *antrum*. The operation for it was twice performed, but however skillfully done, proved, as is too often the case, not to be effectual. We are exceedingly pleased with the candor and free confession of what the author considers to be errors, with which this communication is marked. It augurs well for the profession, and comes with good grace from a highly promising young surgeon.

We next have an article on *Laceration of the Perenium*, by *John P. Mettaeur, A. M., M. D., L. L. D., of Virginia*. The details of two

of seven cases, six of which were completely cured, are here related. The leaden suture is preferred, and every case of this loathsome affliction is considered curable. The character of Dr. M. as a surgeon is too well known to need remark from us.

We pass over several articles, which time and space will not allow us to dwell upon; including a case of the sudden formation of *Hydrops Pericardii*, to the extent of *two quarts* of limpid water; and another similar one of hydrocele, by Dr. S. Jackson of Philadelphia, formerly of Northumberland; and we close with a brief notice of *Blood-letting from the Jugular in Diseases of Children*. This is by Dr. Hildreth of Zanesville, Ohio, and known to the readers of that Journal by his numerous valuable contributions to it. After alluding to the general neglect of letting blood from the external jugular, he says, *I would make this operation the rule instead of the exception*, in many of the acute affections of children *under two or three years of age*; and also in older subjects, in certain diseases of the brain and trachea. He declares, (and what will readily be admitted,) that venesection is here more simple, safer, and more efficacious in arresting certain acute diseases of early life, than by opening a vein in the arm. His apparatus for bleeding from the jugular consists of a cup, a compress and lancet, and with the aid of one assistant. The child being secured across the lap of the nurse, the operator confines its head between his knees, compresses the vein with the thumb of the left hand, makes the requisite opening into the vein, and by pressure with the edge of the cup regulates the flow of blood. The compress may be applied for a few moments, and then replaced by a piece of court or adhesive plaster.

When we consider how difficult it is to bleed from the arm of certain children, the necessity under many circumstances for the abstraction of blood from them, and then remember how simple the operation is when referred to the external jugular vein, our thanks are due to Dr. Hildreth for calling our attention to the subject.

---

*On the Application of Ligatures to Arteries.* By G. J. GUTHRIE, Esq., F.R.S.—(Medical Times.)

[After an admirable set of practical lectures delivered by Mr. Guthrie, at the Westminster Hospital, on this subject, he gives us the following *conclusions*, as being a bird's eye view of his extensive

experience on one of the most important subjects connected with surgery.]—Braithwaite's Retrospect.

1. The Hunterian operation for the cure of an aneurism is not applicable to the treatment of a wounded artery, inasmuch as the wound of the artery communicates with the external parts, and nothing intervenes to prevent blood flowing from the wound in its side, or from its cut extremities.

2. When a large artery is divided and bleeds, the wound should be enlarged if necessary, and a ligature placed on both the divided ends; but if the artery be only injured and not quite divided, the ligatures should be applied, one immediately above, the other below the injured part. The artery may or may not be then cut across, at the pleasure of the operator, but the limb or part should be placed in a relaxed position. A bandage should not be applied, and the edges of the wound should be simply brought together by adhesive plasters, which do not extend completely round the limb.

3. No operation is to be performed on any artery unless it bleeds at the moment of its performance, inasmuch as hemorrhage once suppressed may never return.

4. The intervention of muscular fibres, or of whole muscles, is not a sufficient reason for tying the artery at a distant part. They must be divided, if it be possible, to the extent required for a due exposure of the injured artery and its accompanying veins and nerves.

5. If the wound pass indirectly to the principal artery, from the back of the thigh for instance to the femoral artery in front, or from the outside of the arm to the humeral artery on the inside, the surgeon may (on satisfying himself of the part likely to be injured, by the introduction of a probe) cut down on the vessel opposite that supposed to be wounded, by the most simple and approved method. When the artery is exposed, the probe will point out the spot at which the vessel has in all probability been wounded. Pressure made below this spot on the artery, will cause it to be distended and to bleed, if the flow of blood be not prevented from above; the artery is then to be secured by two ligatures, and the lower one should if possible be applied first.

6. The tourniquet should never be applied in an operation for aneurism or for a wounded artery. Compression by the hand in the course of the wounded vessel is allowable.

7. The blood from the upper end of a divided artery, or that nearer the heart, is of a scarlet arterial colour.

10. The blood from the lower end of a divided artery, or that which is further from the heart, is of a dark or venous colour, when it happens to flow immediately after the division of the vessel. At a subsequent period it may assume more of the colour of arterial blood, but it rarely does so for several days after the receipt of the injury, and always flows, or at least until a very late period, in a continued stream.

11. This regurgitation or flow of blood from the lower end of a



divided artery is a favourable sign, inasmuch as it shows that the collateral circulation will probably be sufficient to maintain the life of the extremity.

12. The collateral circulation is in almost every instance capable of maintaining the life of the upper extremity when the axillary artery is divided, and the colour of the blood which flows from the end of the artery, on its being divided, is not always as dark as in the lower extremity, and it sooner resumes its arterial colour.

13. The collateral circulation is not always capable of maintaining the life of the limb when the femoral artery is injured. The best assistance which art can give is to rub the foot and leg in the gentlest manner, between the hands of one or two strong young women, for several hours, or even for the first three or four days; relaxing this process very little, even during sleep. When the vein is divided at the same time, or rendered impervious, the limb usually mortifies.

14. The collateral circulation is sufficient to maintain the life of an extremity in almost every case in which an aneurism has existed for eight or ten weeks, although it may be incapable of doing this if the principal artery have been suddenly divided, without any previous disease having existed in the part.

15. The theory and the operation for aneurism are never to be applied to the treatment of a wounded artery, which has caused a diffused or circumscribed aneurism, *whilst the external wound communicates with the artery*, unless it be impossible or impracticable to tie the bleeding vessel.

16. When an artery has been wounded, and the external opening has healed for weeks and months, so as to give rise to a diffused or circumscribed aneurism, it may be treated according to the theory of aneurism occurring from an internal cause, if the case will permit it without danger, although with this difference, that as the artery is sound the operation may be performed close to the tumor. If any doubt exist as to the capability of the collateral circulation to support the life of the lower extremity, when the external iliac is secured by ligature, the operation should be performed at the injured part by opening the swelling and enlarging the wound, as in the case of a wounded artery.

17. When a circumscribed or diffused aneurism which has formed after a wound has been opened, whether by accident or design, it is placed in the situation of a wounded artery, and should be treated as such. If the aneurism has arisen from disease of the vessel, and the wound or opening into it cannot be permanently closed, the limb is in a worse state than if the artery had been wounded by accident; because a ligature or ligatures placed on a diseased artery are little likely to be successful. They are liable to all the difficulties and inconveniencies attendant on the old operation for aneurism. If a case of the kind should occur in a popliteal or femoral aneurism, situated at or below where the artery passes between the triceps and

the bone, amputation, if it can be done low down, will be the best remedy. If the aneurism should have formed higher up, and the opening can be closed with any prospect of its healing, a ligature may be placed upon the artery above it; but on the recurrence of hemorrhage which cannot be restrained by moderate pressure, the artery must be tied below, or recourse had to amputation. It is, however, to be observed, that amputation under these circumstances, when resorted to as a third operation, rarely succeed.

18. When an artery is wounded with a simple fracture of a bone, or with a comminuted fracture of the smaller bones, with an external communicating opening, both ends of the artery should be secured, and the limb treated in the usual manner.

19. When the bone broken is the femur, and the artery divided is the femoral artery, the operation of amputation will generally be advisable. It will always be so if the fracture is a comminuted one, or the shaft of the bone is extensively split.

20. When the broken bone injures the artery and gives rise to an aneurism, the treatment is to be first of the fracture and then of the aneurism, as soon as circumstances render it advisable or necessary to have recourse to the operation for aneurism, and which can only be after time has been given for the collateral branches to enlarge, so as to maintain the life of the limb.

21. When mortification takes place in addition to, or as a consequence of, a wounded artery, amputation should be had recourse to forthwith.

22. The place of operation should be in almost all cases at the seat of the original wound; but there may be an exception, viz.—

23. When the injury has been a mere cut, just sufficient to divide the artery and vein immediately below Poupart's ligament, and mortification of the foot supervenes, amputation should be performed below the knee, or at the part where the mortification more usually stops for a time.

This rule is founded on the observation, that great efforts are made by nature to arrest mortification a little below the knee. Sometimes they succeed; when they fail, death is almost inevitable. The advice to amputate at this part is founded on the fact of its being infinitely less dangerous, when done there, than on the thigh, independently of saving a joint.

24. When mortification has *continued for several days*, and is spreading without having once stopped, the constitution of the patient being implicated as marked by fever, amputation should not be performed until the mortification has been arrested and the line of separation has been well formed. In many cases, where there is great weakness or of irritability of constitution, it will be advisable to defer the operation to a later period, particularly if there be hope of the patient's becoming stronger and more tranquil.

25. If the mortification has once stopped and then begins again to spread, it will never again cease to extend, and amputation may give some chance of life.

26. Amputation of the arm should never be had recourse to, in consequence of a wound of the axillary artery, unless mortification takes place.

27. When mortification takes place after the operation for aneurism, the surgeon must be guided by the state of the patient's constitution, in resorting to or refraining from amputation.

28. When hemorrhage takes place from the surface of a stump, the artery should be tied at the part from which the blood comes in the first instance, if it can be easily done. If this should not suffice, the artery must be tied higher up, just at such distance as will afford a fair hope of its not having been affected by the derangement of the stump, which has led to the failure of consolidation in the extremity of the artery, and yet not too high to admit of the junction of any large collateral branches. If the bleeding proceeds from several small vessels, and cannot be arrested, the principal trunk should be tied above the diseased part, and the patient removed to a purer atmosphere, without which, the operation rarely succeeds in any case.

29. When an aneurismal tumour mortifies, it is unnecessary and improper to tie the artery above the tumour, because it will be obliterated if the mortification be arrested by the efforts of nature, which the operation may interfere with, and even prevent, whilst, if the mortification spreads, it will be a matter of supererogation, and only hasten the patient's dissolution. When an aneurism inflames, is opened by ulceration, and bleeds profusely, it is a proper case for amputation, if such an operation can be performed.

---

*Congestive Fever.* By THOMAS BARBOUR, M. D.—(Missouri Medical and Surgical Journal.)

The term *congestive fever* is objected to, on the ground that it rather expresses a concomitant, than the true cause of the peculiar phenomena which distinguish the disease. By this title I mean to designate that *peculiarly* malignant modification of intermittent or remittent fever, which is characterized *from its incipency* by strongly marked symptoms of deep internal congestion, and in which the ganglionic system of nerves seems to be especially implicated. Its universal occurrence in localities and seasons which are favorable to the production of malaria, and its co-existence with all the common varieties of malarious fevers, conclusively demonstrate, that it is caused by some concentrated poison which is generated by the decomposition of organic matter.

It requires but a superficial observation of the phenomena of this disease to be convinced that this cause, whatever it may be, makes its primary impression upon the nervous system; and that all of its characteristic symptoms are the immediate sequences of diminished nervous sensibility. The suddenness of the attack, the numerous indications of nervous derangement, and the rapidly fatal tendency



of the disease, conclusively show, that the brain and the whole nervous system—the main springs of life—are almost overwhelmed in the very first assault of the enemy.

The impression made upon the nervous system is proportionate to the intensity of the poison applied; and the effects on the constitution are various, according to the relative force of vital resistance; hence, whenever it prevails, there is every gradation of the disease, from the slight manifestations of congestion, to the most malignant cases, in which the vital forces are completely overpowered. This leads me to the consideration of the *pathology* of congestive fever, which I will point out in a few words.

The whole nervous system being oppressed by a powerful morbid poison, as necessary consequences, all of the vital functions over which it presides, as respiration, circulation, secretion, &c., become greatly impaired; the capillary circulation throughout the entire system becomes much impeded; and there is a centripetal movement in the circulating fluid, in consequence of which the pulse becomes weak, and the general surface cold and contracted, whilst the internal organs become gorged with blood.

The phenomena dependent upon internal engorgements are various, according to the seat and extent of the congestion. When the brain is the chief seat of congestion, the countenance appears contracted, oppressed, and besotted; there is pain or giddiness, or a sense of heaviness in the head; and there is a strong tendency to coma and insensibility. When the lungs and heart are principally congested, there is a great præcordial oppression; the respiration is short, hurried and oppressed; and there is generally a peculiar livid appearance in the face; the pulse is irregular and oppressed; and there is general coldness of the surface. When the abdominal viscera are the chief seats of congestion, there is a sense of great heat and oppression in the region of the stomach, attended with great thirst, and a constant disposition to retching and vomiting; there is also indescribable restlessness; sometimes the bowels are torpid, but most generally they are very loose—thin, serous discharges passing off in enormous quantities, which contribute rapidly to prostration and death. Autopsy usually reveals the true source of all the foregoing symptoms. The various organs are found more or less gorged with blood; which was the cause of their oppression and embarrassment during life.

With this brief view of the pathology, I pass on to the consideration of the *symptoms* of congestive fever. The premonitory symptoms, which are, generally, of short duration, are those which commonly precede other forms of fever, such as languor and lassitude, a sense of weariness, and general uneasiness, loss of appetite, and disturbance of the stomach and bowels. Next to these succeed chilly sensations—alternated by flashes of heat, soon after which the patient has a regular paroxysm, characterized by a protracted cold stage—the system, most generally, being unable to recover its natural temperature before the occurrence of the second paroxysms.

The type of this fever corresponds with the double tertian of the old authors, being subject to quotidian paroxysms, but on each alternate day to an increased aggravation of the symptoms. Thus, on the third and the fifth days, the paroxysms are usually very severe, and followed by a protracted cold stage, from which the system reacts very slowly. The anxiously looked-for hot stage is rarely or never fully developed, even in what might be called mild cases. But, instead of it, the temperature of the whole surface is greatly diminished and irregular—the extremities being much colder than the trunk. The pulse becomes exceedingly weak and quick; the respiration is short, hurried, and difficult; the patient complains of a painful sense of heat and weight in the epigastrium, accompanied with insatiable thirst; there is uncontrollable restlessness; the patient tosses himself from side to side, and often rises up, as if to relieve the oppression of the lungs; there is either pain or giddiness, or sense of weight in the head; and the countenance looks contracted, pale, anxious, and often livid; the tongue is generally moist; and the bowels, in a large majority of cases, are loose, and the dejections serous.

The above sketch presents a tolerably correct delineation of the symptoms of ordinary congestive fever, as they present themselves at an early period of the disease.

They are, however, subject to considerable modification, according as the brain and spinal marrow, the lungs, or the abdominal viscera are the chief seats of congestion; the most prominent symptoms in each case being particularly referable to the chiefly engorged organs.

If the condition above detailed is not soon removed by the recuperative efforts which nature makes to throw off the oppressive load under which she is laboring, aided by proper remedial agents, there is a rapid tendency to fatal collapse. This usually occurs either on the third or the fifth days, when, as has been remarked, the paroxysms are unusually severe. This condition is marked by all the symptoms, which indicate profound congestion. The extremities, and, indeed, the whole surface, become as cold as ice; the whole body is bathed with cold clammy sweat; the skin loses its elasticity, resuming, very slowly, its natural situation, when pinched up; the pulse is very quick, and scarcely perceptible; the thirst is insatiable; and there is uncontrollable anxiety and restlessness; the respiration becomes shorter, more hurried, and oppressed; and there are strong marks of diminished sensibility, as a disposition to lethargy, and even to coma, with great muscular prostration. If unchecked, these symptoms increase with a rapid pace, and soon terminate in death.

But congestive fever does not always follow the regular course above described. Sometimes, instead of suffocated excitement, after the first or second regular paroxysms, there is full and violent reaction, and the stage of excitement continues for twenty-four, thirty six, or forty-eight hours, with little or no remission, when the system, seeming to be exhausted by the violence of the excitement, rapidly sinks into collapse.

This modification generally occurs when there are internal inflammations, as indicated by pressure over the epigastrium, the right hypochondriac region, or over some portion of the bowels.

In other instances, the first regular paroxysm is succeeded by the strongest marks of deep congestion, and complete collapse of the powers of nature.

So far as my observation has extended, this last modification almost universally occurs either in aged persons, of feeble and broken down constitutions, or in those who have debilitated themselves by the use of harsh purgatives, or by the use of a too common remedy among southern planters, the emeto-cathartic *salts and tartar*, which most generally causes great gastric and intestinal irritation, which induces a rapid fluxionary movement in the circulating fluid towards the chylopoietic viscera, which causes inequality of the circulation, and rapidly prostrates, by the copious serous discharges which ensue.

We now come to the most important part of our subject—the treatment of the different modifications of congestive fever. What are the leading indications of treatment in this disease, founded on the pathological views which have been taken of it? The great objects at which we should aim in the use of therapeutic means, are—first, to restore the lost balance of the circulation; second, to counteract the tendency to a recurrence of the paroxysms; and third, to restore the suspended secretions.

What are the best means of fulfilling the first indication, namely, the equalization of the circulation? There is great discrepancy of opinion among medical men in relation to this. We are informed by Armstrong, that the hot vapour bath, or the common hot bath, with bottles of hot water to the feet and hands, &c., together with calomel and opium, dry brandy and hot ginger tea, are incomparably superior to any other agent for the promotion of reaction.

With due deference to such distinguished authority, I would remark, that whilst I do not doubt the efficacy of the above treatment in the congestive diseases of the great metropolis of England, my experience convinces me that it is, in a large majority of cases, altogether inadequate to the removal of the malignant congestive fever which is incident to unhealthy localities in southern climates.

In the first cases of congestive fever which I ever saw, I confidently relied on the treatment of Armstrong, because I knew of no better practice, and because it seemed to be altogether consonant with reason to give internal stimulants, and apply external heat. The conclusion to which my observations have led me is, that this treatment is adequate to the restoration of the lost balance of the circulation, only in those cases which are occasioned by common causes; or in the *mildest* cases of congestive fever. In all the worst cases of this disease which have come under my notice, the hot bath and most diffusible stimulants have done injury rather than good, the patients appearing, generally, more relaxed and oppressed after they had been used. The remedy which I estimate above all others, in the treat-



ment of congestive fever, is the affusion of cold water. My own comparatively limited experience, and the ample experience of many intelligent practitioners in the South, sustain me in the declaration, that the affusion of cold water upon the naked body is capable of producing the most beneficial effects; and in a large majority of even the most malignant cases, of inducing the most complete and permanent reaction. I acknowledge, that when I first used this potent and novel agent, I rather distrusted its propriety, because I could not very well understand how cold, applied to a surface already as cold as ice, could effect any good purpose. But no sooner had I tried it, and witnessed its effects, than I became convinced of the erroneous view which I had taken of its *modus operandi*, and which had deterred me from adopting it sooner. So well am I assured of its invaluable efficacy as a powerful excitant to the nervous system, that I now feel no more hesitation in its adoption than I do in the use of the lancet in inflammatory affections; for the principle upon which it operates is just as obvious to my mind.

Who would hesitate to dash cold water on a patient who was overwhelmed by the effects of opium? Surely no practical medical man would, if he knew its efficacy. Why? Because it is known to be capable of arousing and sustaining the oppressed nervous system, by the stimulant impression which it makes upon it. Why, then, should there be a doubt about its applicability to a disease which we believe to be dependent upon a poison which oppresses and paralyzes the whole nervous system? The analogy, as regards the condition in the two cases, is perfectly just; and the principle on which the remedy acts is identical. That this is the fact, its almost universal effects abundantly testify.

The modes of application which I have adopted are the following: Have a broad plank placed upon two chairs, at a convenient distance apart, and place two vessels of hot water on each side, corresponding with the feet and hands; then strip the patient, and lay him on his back on the plank, with his extremities in the hot water, and having at hand twenty or thirty gallons of spring water, or, what would be better, water made colder by ice or salt; pour the water from a pitcher, in a full and rapid stream, over the chest and abdomen. The advantage of this mode is, that the cold is directly applied over the most common seats of congestion, whilst the circulation is invited to the extremities by hot water.

The second mode which I adopt, particularly in cases where the brain and spinal marrow are the chief seats of congestion, is to place the patient upon a blanket upon the floor, and cause him to turn upon his side, and dash cold water as forcibly as possible over the head and down the spinal column. This method is often the most effectual, because its influence is more immediately felt by the great nervous centres. Having applied the water, the patient should be quickly wiped and placed in bed, and be covered with two or three blankets. I have sometimes had the patient surrounded with hot stones, or bot-

tles filled with hot water, after being placed in bed; but I am now satisfied that it is improper to do so, on account of the relaxing influence of the heat, and the debilitating effects of the copious perspiration induced by it. Instead of heating the patient, I cause him, as soon as he has received the cold dash, and is placed in bed, to be extensively and forcibly rubbed, either with dry mustard flour, or salt, or with spirits of turpentine.

The effects of the cold dash are frequently permanent, and complete reaction takes place, followed by rapid convalescence. In many instances, however, the effects of the first affusion subside, and the patient relapses into his former condition of coldness, restlessness and insensibility. In such cases, it is proper to repeat the affusion, until complete and permanent reaction takes place, which may be confidently anticipated in a large majority of the worst cases, provided it is applied sufficiently early.

Unfortunately for the reputation of this invaluable remedy, it is deferred too long, and most generally resorted to only as a *dernier resource*; in consequence of which, the system loses all susceptibility of its impression; or some vital organ or organs become irreparably injured, and hence its use proves abortive.

There is no just reason why its adoption should be delayed. If it is capable of producing such salutary effects in the latter periods of the disease, when the vital principle is almost extinguished, how much more triumphant would be the success attending its use at an early period, when the vital organs, most generally, are not seriously injured, but only burdened with an undue quantity of blood, and when the susceptibility of impression is but little impaired.

Next in importance to the cold affusion, with a view to the establishment of healthy reaction, are opium and sulphate of quinine. My usual practice is to give, at once, 100 drops of common laudanum; or the same proportion of the following compound tincture, which I estimate very highly:—*R.* Gum opii, gum camph., cort. cinnam., ol. caryophyl, *aa* one oz.; capsic. pulv., half oz.; Hoffman's anodyne liquor, one pint. Macerate for twenty days, and filter. The above portion may be repeated once or twice, according to circumstances, at intervals of two or three hours; after which I make use of sulphate of quinine, in combination with morphia and calomel, according to the following *R.*:—Sulph. quiniæ, one drachm; hydrarg. prot. chlorid., half drachm; sulph. morphiæ, grs. ii.; m. ft. chart. xii. One to be given every hour or two, until full reaction is induced.

Some practitioners, especially in the South, make use of enormous doses of calomel—as 50 to 200 grains—and repeat them often, with the view of unlocking the liver and inducing reaction. My own experience is opposed to calomel in such large doses. I am satisfied that small portions, as three to five grains, repeated every two hours, are better calculated to fulfil the indications for which it is given. When administered in large doses, it is apt to induce copious watery discharges—a consequence which might be very reasonably expect-

ed, when it is remembered that the liver and bowels are in an engorged condition, and of course not possessed of their natural susceptibility of impression; hence, such large quantities become a source of great irritation. It is very doubtful whether calomel, in any doses, is capable of producing its specific effect upon the liver, so long as it continues gorged with blood; and when reaction takes place, and this viscus becomes disburdened, small portions much more certainly affect it, because they are much less apt to pass off by the bowels. As auxiliaries to the above means, I generally apply cups along the course of the spine, over the epigastrium, right hypochondrium, or chest, according to the indications; and follow them with large sinapisms. When there are strong marks of cerebral congestion, a blister over the cervical portion of the spine is often productive of good effects.

In regard to the propriety of general blood-letting in this form of fever, there is much diversity of opinion: some, guided by the plausible speculations of Mackintosh, regard venesection not only as a safe means of cure, but an indispensably necessary one to relieve the various internal organs that are oppressed by an undue amount of blood; others, guided by the lights of their own observation and experience, consider the use of the lancet not only of doubtful efficacy, but hazardous in the extreme. My own impression is, that general blood-letting is very rarely necessary, and that in most cases it is highly unsafe and injudicious, during the cold stage, on account of the great depression of the nervous system, and consequent tendency to collapse.

When complete reaction is established, what course of treatment should be pursued? If the reaction is moderate, which is usually the case, all that will be necessary, generally, will be to administer alterant portions of blue pill, in combination with opium or morphia, to promote the secretions and control nervous excitement, and quinine to sustain the weakened powers of nature, and prevent the recurrence of the paroxysms, to which there is always a great liability. The following prescription is well calculated to fulfil the indications of treatment:—*R.* Mass., hydrarg., sulph. quinx. each a half drachm; sulph. morphiæ, one grain; ft. pil. xvi.—two to be given every three hours. If the blue pill does not act gently on the bowels, a seidlitz powder may be given occasionally; or the bowels may be evacuated by means of stimulating enemata. Should the reaction become violent, it will be necessary to moderate vascular excitement, as the organs which have been gorged with blood, and consequently weakened and irritated, are strongly disposed to inflammation, which would be difficult of removal, on account of the inability of the system to bear depletion to any great extent. In such cases it is generally sufficient to apply cups over the various seats of congestion, administer calomel purges, and repeatedly use the cold or tepid affusion. If the above means prove to be inadequate, it may be proper to draw blood to a moderate extent from the arm: but this should be



done with great caution, as the power of resistance in these cases is so low, that not unfrequently high excitement is suddenly followed by great prostration. The pulse should be carefully watched, and upon the slightest manifestation of failure, the orifice should be closed, and some diffusible stimulant administered. As soon as the excitement begins to abate, the pills of blue mass, quinine and morphine, as above prescribed, should be given, and continued for several days, in order to excite healthy biliary discharges and prevent a relapse.

During the progress of the disease, as well as during convalescence, strict attention should be paid to regimen. It is very necessary to adapt the aliments to the weakened digestive organs: rice, barley, or chicken water may be allowed, until the disease is arrested. During convalescence, chicken broth or well-boiled rice, with milk, will be appropriate. For drink, nothing is so grateful or salutary as *simple cold water*, it tending in an eminent degree to allay gastric irritability and general restlessness, which is usually so very distressing. With the same view, small pieces of ice may be occasionally swallowed.

---

*Death by Strychnine.* Report on the Case of the late Dr. W. C. WARNER.—(Boston Med. and Surg. Journal.)

At a late meeting of the Addison County Medical Society of Vermont, the undersigned were appointed a committee to ascertain the facts in the case of one of their members, the unfortunate William Cullen Warner, M. D., of Bristol, who deceased, suddenly, at Montpelier, October 11th, 1846, in the thirty-ninth year of his age, while he was a member of the Legislature.

On account of there having been considerable discrepancy in the published reports in relation to this melancholy event, the committee addressed letters of inquiry to the Hon. Daniel O. Onion, M. D., of the Vermont Senate, and to Charles W. Horton, M. D., member of the House, each of whom, they had learned, were present during most, if not all, the period of the sudden and tragical event. To the inquiries of the committee, each of these gentlemen have given prompt and satisfactory replies, which in substance are here subjoined.

1. In your opinion how much sulphate of strychnia was taken?

To this Dr. Onion answers, "I think probably from one-fourth to one-half a grain. As he intended to take, and supposed he was taking, morphia, he would be likely to use the same quantity he was in the habit of using of that article, although there was no evidence at the time of the quantity taken." To Dr. Horton, who was called into the room immediately after the accident, Dr. Warner said, "Doctor, I have taken, by accident, an over-dose of morphine; help me if you can," at the same time handing him the phial enveloped in paper.

2. How soon after was any effect produced?

Dr. Horton says, "It is my opinion, from facts subsequently ob-

tained from Gen. W. Nash, who occupied the same room with him, that he felt the effects in less than five minutes."

3. What was the first symptom?

Dr. H. replies, "constriction of the throat and tightness of the chest, with rigidity of the muscles in attempting to move." Dr. O. says, "He first complained of a want of air, and requested the window to be raised; whether it was from faintness or a constriction about the respiratory organs, I do not know, although I think the latter."

4. What symptoms ensued from the first till death occurred?

Says Dr. O., "When I first saw him, he was lying upon the bed in a complete *tetanic convulsion*; his head somewhat drawn back; his countenance completely livid, with some frothy matter issuing from his mouth, with frequent moans. The palpebra constantly in motion. This first paroxysm may have lasted some five minutes, which was succeeded by an interval of partial calm." "During this interval," continues Dr. O., "it was somewhat difficult for him to articulate with distinctness. He made several attempts to vomit in this interval, by exciting the fauces with his finger. There seemed to be some constriction about the throat, as it was difficult for him to swallow. This interval lasted perhaps five minutes, when another paroxysm commenced by a little starting and stiffening of the extremities, and immediately the whole body was thrown into a tetanic paroxysm, in appearance like the first, and lasted two or three minutes, when death ended the struggle."

"In about three minutes from the first paroxysm," says Dr. H., "the tetanus again returned, and in the space of two minutes death closed the scene, with terrible spasms of the entire system. The pulse remained unaffected till the last struggle. It is my opinion that the immediate cause of death was suspension (?) from spasm."

"His appearance," says Dr. O., "led me to believe that death ensued from asphyxia or suffocation. There must have been great congestion of the brain, which of itself might have proved fatal."

5. How soon after taking the article did death occur?

Dr. H. says, "From the best information which I could obtain, I should judge that death ensued in fourteen minutes." "The time from taking the article till death ensued," Dr. O. remarks, "could not have been over twenty minutes."

6. Did his mind remain clear till the last struggle?

"I think," replies Dr. H., "that he was perfectly conscious from the first to the last, except in the paroxysm of tetanus, from the following facts:—1. His appeal which he made to me, as noted in the first article. 2. On loosening his cravat, he requested me to unbutton his vest, at the same time desiring me to take out his gold watch and take care of it. 3. An emetic having been administered, he applied his finger to his throat to provoke a nausea. 4. And, from the last words he uttered, '*I fear, I fear, O God deliver me.*'"

7. What means were used to prevent the fatal result?

Dr. H. says, "On witnessing the first symptoms, I left the room for the purpose of obtaining medicine. I procured an emetic of sulphate of copper and ipecac.; but returning and finding him in a tetanus, I immediately dashed cold water on his head, face and breast, and used the most powerful friction on the extremities. He returned to a state of perfect consciousness. I then proceeded forthwith to administer the emetic, making use of diluents copiously. I sent a messenger for some vinegar and ground mustard, and another for a stomach pump. I used the ground mustard, in warm water freely, to all of which the patient submitted, seeming to be very grateful for the efforts which I was making for his relief. The means were used without any apparent effects." "When death had ensued, a number of the medical fraternity being present, we retired into an adjoining room, when the fatal bottle was produced, with the wrapper still around it. On removing this, it was found labelled 'strychnine.'" Dr. O. states, that "till this time, we were in ignorance of what he had taken." Dr. H. avers, "that here I wish definitely to state, that before the last paroxysm came on, I was fully convinced in my own mind that the fatal drug was not morphia, but strychnia, and I so declared to those present at the time."

From facts before the committee, derived from reliable sources, it appears that on the afternoon of the second day before the fatal accident, Dr. Warner called at an apothecary store in Montpelier, and asked for and purchased what he supposed to have been a bottle of sulphate of morphia. This was handed to him by the apothecary enveloped in brown paper and twisted at both ends. That on the fatal morning Dr. W. tore off the envelope surrounding the mouth of the bottle, and took a portion of what he supposed to have been morphia. He then proceeded to pour some of the supposed morphia into a small phial into which he had been in the habit of carrying sulphate of morphia, when he was suddenly arrested by the symptoms narrated. It is quite clear that he never entertained any idea of the fatal drug he had taken. "I am certain," says his afflicted brother, "that he never for a moment suspected that he had taken strychnia, and was wholly unconscious of the agency which had produced his awfully unprecedented sufferings."

Dr. W. had never possessed very firm health, and for about two years before his death he had suffered from an inordinate action of the heart, for which he had occasionally taken morphia. This affection of the heart had been the sequence of an inflammatory affection of the chest, which he had early in the year 1844.

The committee has taken considerable pains to ascertain the facts in this melancholy instance of death from a mysterious mistake. The mistake was certainly a singular and mysterious one, both in relation to the apothecary and the unfortunate man. It appears that Dr. W. asked for sulphate of morphia; the apothecary intended and supposed he had sold him morphia till after the fatal event, when he found, through mistake, he had given him, enveloped in a paper, a bottle of



sulphate of strychnia in lieu of morphia. This exposition of facts appears to be demanded in justice to the character of the deceased, to the apothecary and to the medical profession.

In a medical point of view, the case is one of much and deep interest, since it so clearly manifests the true and energetic character of this somewhat new medicinal agent. And in a medico-legal consideration, it may prove of immense importance. In the suddenness of the effects, and in the quickness of the fatality, from the use of strychnia, this case is probably without a precedent. Christison, Pereira, and several monographical writers, in the periodicals, have recorded some bad results, and some fatal cases, from over dosing with this agent; but no instance has fallen under our notice in the human subject in which its administration, either accidentally or otherwise, has so speedily and terrifically proved fatal.

"No poison," says Christison, "is endowed with more destructive energy than strychnia." "I have," he adds, "killed a dog in two minutes with the sixth part of a grain, injected in the form of an alcoholic solution in the chest. I have seen a wild boar killed in the same manner with the third of a grain, in ten minutes; and there is little doubt that half a grain thrust into a wound might kill a man in less than a quarter of an hour. It acts in whatever way it is introduced into the system, but most energetically when injected into the veins."

With the exception of prussic and oxalic acids, there is probably no agent possessing an equally destructive power. Strong prussic acid is well known to be sufficiently energetic to destroy cats or dogs, when properly administered, in less than a minute. And Pereira examined the body of a man who had accidentally taken oxalic acid in lieu of Epsom salts, and died in twenty minutes.

JONATHAN A. ALLEN, M. D.

ERASMUS D. WARNER, M. D.

WM. P. RUSSELL, M. D.

---

*Two Cases of Croup cured by Cauterizing the Larynx with a Solution of Nitrate of Silver.* By WM. N. BLAKEMAN, M. D.—(New York Medical and Surgical Reporter.)

On the 10th November, 1846, I was called to see a child of Mr. A., about two years old, very fat, large for his age, and of leuco-phlegmatic temperament. I first saw him at 10 o'clock in the evening, five hours after the commencement of the disease, with a hot, dry skin, quick pulse, great restlessness, laborious breathing, and the hoarse barking or crowing sound peculiar to croup. The family had, previous to my arrival, given freely of Coxe's hive syrup.

I gave tinct. sang., comp. syrup scillæ, with pulv. ipecac., which caused vomiting, but no relief to the patient. At 3 o'clock on the morning of the 11th, I gave six grains prot. chlor. hyd., and after

waiting two hours, began with the above mixture, to which I added five grains of tart. antim. ; more free vomiting was produced, and a copious discharge from the bowels, at 8 o'clock, but without any mitigation of a single symptom. I then stopped using the above mixture, and gave per-sulph. of mer., in doses of qu. grain, the second dose to be given in half an hour after the first, and then at intervals of an hour. The child drank freely of warm water, and vomited some after each repetition of the medicine, but none of that peculiar, heavy, glairy substance, which is the secretion of this specific inflammation. At 5 o'clock, P. M., the remedies having done no good, and with the symptoms of suffocation becoming alarming, I resolved to try the effect of cauterizing the larynx with a solution of nitrate of silver, a drachm to an ounce of water.

The application was somewhat difficult, and the dyspnœa very great. A quantity of the thick tenacious substance was brought away by the sponge, &c., a large quantity by vomiting, which followed.

After waiting ten minutes, I made a second application, bringing away a larger quantity of membranous matter on the sponge than before, and a much more copious discharge accompanied the vomiting, caused by the application.

The disease now seemed to be arrested, as very great relief was apparent to all the family. The breathing was less laborious, the crowing sound less sharp, and the child more quiet.

I saw the boy at half past 10 o'clock, same evening, five hours and a half after the first application ; he had improved in all the symptoms, breathing decidedly better, the barking sound heard only at intervals, and he had asked for drink.

I now made a third application of the same solution, which brought as before, on the sponge, some thick tenacious matter differing from the first in being of a yellow colour. The boy vomited *several* times after *this* application, each time throwing off a large quantity of the same yellow-coloured, thick substance, so tough that it could be raised from the bowl by the fingers. Soon after the vomiting ceased the child was so much better he fell asleep, in which situation I left him, with directions to be called if required before morning.

12th, 7 o'clock, A. M., I found him sitting on the bed calling for food ; he had slept pretty well, asking for drink occasionally, a slight hoarseness left, for which he required no further treatment.

CASE II.—I was called on the 20th of January, at 12 o'clock at night, to see a boy six years old, of sanguine temperament, and florid complexion, who was taken about two hours before with croup. The pulse quick, skin hot and dry, the breathing hurried and difficult, the crowing noise loud, and the child very restless. I determined that the remedy used last in the former case should be first in this. I made two applications of the same solution used in the former case. Some tough phlegm came away on the sponge, and free vomiting followed, which relieved the patient so that he fell asleep.

21st, 7 o'clock, A. M. The boy has slept well all night, and says he is quite well, only a little hoarse.

---

*On the Action of Ammonia in Hooping-Cough.* By R. H. ALLNATT, M. D., London.—[Lancet, from Braithwaite's Retrospect.]

[Dr. Wachtl, of Vienna, recommends the employment of ammoniated tincture of cochineal in hooping-cough. Dr. Allnatt thinks that the spasmodic action of the glottis which remains after the febrile action has subsided, arises from morbid irritability of the stomach, engendering a morbid secretion, which stimulates the exhalent vessels of the trachea and bronchi to inordinate action. Dr. Allnatt adds:]

The excretions of the stomach in this state of disease, if tested, will be found, almost invariably, to be of extreme acidity, sometimes so intense, as to excoriate in their passage the œsophagus, and roughen the teeth, as effectually as would a dose of dilute hydrochloric acid. Emetics, so greatly extolled for their virtues in subduing the paroxysms of hooping-cough, act as temporary alleviants, by ridding the stomach of its acrid secretion; but the relief is transient, because the organ speedily resumes its disordered action. Many years ago, during a temporary visit to a populous town in the west of England, while the hooping-cough raged as endemic to an alarming extent, many children falling victims to its attacks, I had an opportunity of testing the merits of practice founded upon the views I have taken, and the result fully justified my anticipations, as the cases, however urgent, were rapidly and permanently relieved.

Dr. Wachtl, by his ammoniacal mixture, is stated to have "cured nine cases in from three to eleven days," and I may fully believe the assertion to be quite consistent with truth. The liquor ammoniæ, the active ingredient of the formula, neutralized, in some degree, the acid matter with which it came in contact, and hence arose the benefit; but we have other alkalies, less stimulating in their action, and much more effectual, than ammonia.

After preliminary purgation with calomel, (conjoined with antimony, if the febrile symptoms run high,) and an occasional emetic to clear the stomach, nothing in my experience is so efficacious as small and repeated doses of the carbonate of potassa. The following combination has been extensively distributed to the poor in seasons when hooping-cough has raged as an epidemic, and I can attest the almost invariable success which has attended its administration—what portion of the merit is due to the cochineal I do not know:—Take of carbonate of potassa, one drachm; cochineal, ten grains; boiling water, half-a-pint. For an infant, one tea-spoonful to be taken thrice daily: the dose increased according to age.

In violent cases, much benefit will often accrue from the simultaneous employment of the following liniment, which is to be well rubbed, morning and night, over the whole course of the spine:—Hartshorn and oil of amber, of each half an ounce. Mix for a liniment.



---

*Case of Poisoning by Arsenic, successfully treated with freshly prepared Hydrated-per-oxide of Iron.* By C. A. HALL, M. D., of Northampton, Mass.—(Buffalo Med. Journal.)

White oxide of Arsenic had been obtained for destroying rats. The label and the paper containing it had been partially destroyed by the corrosive action of the Arsenic, and it had been poured out into a tea-cup, and put aside to be re-labelled at some future time. Subsequently, the family removed to another house, and, in the confusion arising therefrom, the Arsenic was placed near a tea-cup of the same color containing super carbonate of soda.

On the 25th of December, 1846, half a tea-spoonful of the Arsenic, probably about 80 grains, mistaking it for the sup. carbonate of Soda, was put into a pudding, the greater part of which was afterwards eaten by two persons. In less than half an hour, severe and distressing sickness came on, with vomiting and great prostration. Being alone in the house, and unable even to raise a window to call assistance, they remained for some time in this dangerous situation. Fortunately a sister, who had been absent, returned home, and in a few minutes afterwards I was at the house. Finding that Arsenic had been taken in so large a quantity, and knowing of but one perfectly effectual antidote, I at once proceeded to prepare a quantity of the hydrated peroxide of Iron, which I administered with an unsparing hand. In less than half an hour, decided relief was obtained, the retching and vomiting, though still kept up, occurred at longer intervals, and with less severity. The pain and faintness continued more or less during the night, yet the relief already apparent, induced me to continue the use of the antidote. The next day the vomiting occurred but once or twice, and in one only of the persons. In the meantime, however a new train of symptoms came on. The tongue was swollen, there was a burning pain and considerable inflammation in the throat, accompanied with great thirst, and in one of the cases with hicough, and much tenderness of the epigastrium. The evacuations from the bowels were dark and offensive, and attended with pain and tenesmus. There was for a long time great prostration of strength; indeed, neither of the persons have felt quite well until within a few days.

I am induced to make these cases public, not only to give additional evidence of the efficacy of the *freshly prepared* hydrated peroxide of Iron, as an antidote to poisoning by white oxide of Arsenic; but, also, since it is well known that the remedy is of little use except when *freshly prepared*, to urge it upon every medical man, not only to bear in mind how it is prepared, but actually to go through the manipulations, and prepare it, once at least, for himself. Then, when it is wanted, as it always is in haste, and when there is no time to look for specific directions, he can prepare it more dexterously, and with no doubts or misgivings as to its purity.

Lest there may be some one of your readers who has not a formula

for preparing the Hydrated peroxide of Iron, I subjoin that of the last edition (1845) of the U. S. Pharmacopœia. It has been well suggested that the articles for making it should be kept in vials, in the proper proportions, ready for use at a moment's notice:—℞. Sulphate of iron, oz. iv. ; sulphuric acid, f. dr. iiiss. ; nitric acid, f. dr. vi. or q. s. ; solution of ammonia, q. s. ; water, oil ; dissolve the sulphate of iron in water, add the sulphuric acid, and boil the solution ; then add the nitric acid in small portions, boiling the liquid for a minute after each addition, until the acid ceases to produce a dark color. Filter the liquid, allow it to cool, and add solution of ammonia in excess, stirring the mixture briskly ; wash the precipitate with water until the washings yield no precipitate with chloride of barium."

In the foregoing case, I used no sulphuric acid. I did not filter the liquid, or wait for it to cool, nor did I stop to test it with chloride of barium ; but washed it three or four times with water, poured it on cotton cloth, and administered it while hot. Doubtless the better plan would be to follow exactly the directions of the Pharmacopœia.

### *Fever a Disease of the Spleen.*

To the Editor of the Lancet:

More busied in the "sport of musing" than in the "labour of thought," a sentence in a past number of a contemporary suggests to me the following reflections.

Dr. Williams, of University College Hospital, lecturing on the subject of intermittent fever, in noticing the "poor, impoverished state of the blood," which attends the disease, adds, "It has been a matter of doubt (question?) among physiologists, as well as pathologists, how it is that disease of the spleen so peculiarly produces this anæmia." (*Gaz.*, Oct. 24th, 1845.) In elucidation of this point, I may observe that it has been long a matter of conviction with me that the spleen is the laboratory of the hæmotosine of the blood. Harvey, indeed, disclosed how the blood is distributed ; but philosophers appear very generally to have forgotten to ask themselves whence it is got?—where it is made? The heart pumps, the vessels convey, the lungs aerate, the liver and kidneys depurate, and chyle-milk renovates, the blood ; but, *de novo*, where is it generated?—whence is it originally derived?—where is it that the chylous supplies are converted into red globules? Most certainly, to my apprehension, in the passage through the spleen.

There are those with whom it has been a favorite theory that fevers are disease of the blood. I believe that fevers are diseases of the spleen. Of this I think there exists adequate evidence. Of course I do not allude to symptomatic or nervous "fevers." A lesion of the function of the spleen vitiates its product—i. e., vitiates the manufacture of hæmotosine. I have even an idea that the rigors of ague have some relation to a crisis of puruloid secretion in the

splenic apparatus—a vitiation of the splenic process of the formation of the red principle. It would not appear difficult to account in this way for the translation of purulent deposits. I have an idea that the production of animal heat takes place whenever and where ever arterial blood becomes venous—viz., in the capillary transit; and that the splenic product, the hæmatosine of the blood, plays an important part in the process. If the functions of the spleen, then, be those not only of the generation of new globules, but also of the renovation or regeneration of the old, exhausted, or deteriorated red particles,—alike the renovation of the old, and the production of the new material of the elementary constituents of the blood, the hæmatosine, hæmatin, or cruorin,—it is easy to perceive in what way “disease of the spleen so peculiarly produces anæmia.” By the objectionable term “anæmia,” an absence of the red particles, the radical constituent of blood, is properly indicated. In the history of fevers, after a review of the facts which connect fevers with the spleen and the blood, it will not be difficult to come to the conclusion that fevers are diseases of the spleen, in reference to the functions of that organ as the laboratory of the elementary constituent of the blood, the hæmatosine.

I have the honor to be, Sir, your obedient servant,  
*Hamilton, Nov. 1846.*

B. HAYGARTH.

---

*A Case of Poisoning from Nitric Acid—vomiting of a considerable portion of the stomach, and yet no effusion into the peritoneum.*

We find the following singular and most remarkable case recorded by Dr. C. F. BASSE, of Heidelberg, and it is translated from the review department of the Archives Générales de Médecine of Paris.

A workman, aged 50 years, and addicted to drink, swallowed two ounces of nitric acid weakened with water. This he did on the 9th of May, 1845; and with the intention to kill himself. He immediately experienced dreadful pain in the mouth, pharynx and œsophagus, and vomited a portion of the poison. Several hours after this he walked to a hospital and solicited relief; but he was taken to prison, and an oleaginous emulsion given him. The next day, his sufferings having increased, he was transferred to a hospital, 36 hours after swallowing the acid. The mouth and tongue were lined with a whitish membrane; the pharynx and tonsils were considerably tumefied and injected; the epidermis of the lips, particularly the inferior, was marked by yellow lines; the respiration was difficult; thirst intense; pain in the epigastrium with retraction of the belly; pulse small and frequent. Treatment, antiphlogistic. The following day the patient was in the same state. Eight days subsequently, he commenced to have appetite. During the night of the 6th to the 7th of June, he vomited what he had eaten, and the nausea and desire



to emesis became constant. The matter vomited was very foetid and had a gangrenous odour, and with black fluid blood he ejected a broad piece of membrane a foot long, of a black color, pierced with holes of different diameters, of a fibrous structure and having a very thin epithelium. This membrane was recognized as the *vascular and serous coats of the stomach*. The vomitings were followed by very abundant blackish and foetid dejections. He continued in this state to the 1st of June, when he died.

*Autopsy.* Upon raising the left lobe of the liver, *the anterior part of the stomach, from the œsophagus to the duodenum was found wanting*. Its anterior wall was supplied by the concave surface of the liver, by the transverse colon, and some remains of the coats of the stomach. The posterior portion of the gastric organ was not destroyed, but its walls were soft and gangrenous. Notwithstanding this condition of the stomach, there had been *no effusion into the peritoneum*, because the liver adhered to the colon and the remains of this organ were agglutinated to the spleen and diaphragm. Thus a new cavity was formed, leading from the œsophagus to the duodenum. The œsophagus was deprived throughout its whole extent of epithelium, and the surrounding parts of the new sac or artificial stomach, were blackish, softened, and exhaled a foetid odour.

Here is an instance of the destruction of more than half of the stomach, without the escape of alimentary substances into the peritoneum. The patient too vomited a part of his own stomach, and lived a month and five days. This case strengthens M. Magendie's theory of vomiting—viz., that this function is owing to the influence of the diaphragm and abdominal muscles, and not to the action of the stomach, which is purely passive.

---

### *Conclusions Relative to the Structure and Functions of the Placenta.*

By JOHN GOODSIR, Esq.—(Med. Gaz., from Braithwaite.)

[In vol. xii., p. 539, we briefly gave the opinions of Mr. Goodsir on this subject. In the following extract, however, they are a little more in detail:]

1. The placenta, as has long been admitted, consists of a foetal and a maternal portion intermixed. But the maternal portion, instead of consisting of a part of the vascular system of the mother only, includes the whole of the external cells of the villi.

2. The external membrane of the placental villi is a portion of the wall of the vascular system of the mother, continuous with the rest of that wall, through the medium of the placental threads and lining membrane of the placental cavity.

3. The system of the external cells of the placental villi belongs to the decidua, and is continuous with the parietal division through the medium of the cavities of the placental threads. This portion of

the decidua has been named the central division of the placental decidua, and the threads, decidual bars.

4. The function of the external cells of placental villi is to separate from the blood of the mother the matter destined for the blood of the fœtus. They are, therefore, secreting cells, and are the remains of the secreting mucous membrane of the uterus.

5. Immediately within the external cells of the placental villi, there is a membrane which I have named the internal membrane of the villi. The membrane belongs to the system of the fœtus, and in the external or bounding membrane of the villi of the chorion.

6. Inclosed within the internal membrane of the placental villi, is a system of cells which belong to the system of the fœtus, and are the cells of the villi of the chorion. These are the internal cells of the placental villus.

7. The function of the internal cells of the placental villi is to absorb through the internal membrane the matter secreted by the agency of the external cells of the villi.

8. The external cells of the placental villi perform, during intra-uterine existence, a function for which is substituted in extra-uterine life, the digestive action of the gastro-intestinal mucous membrane.

9. The internal cells of the placental villi perform, during intra-uterine existence, a function for which is substituted in extra-uterine life, the digestive action of the gastro-intestinal mucous membrane.

10. The placenta, therefore, not only performs, as has been always admitted, the functions of a lung, but also the function of an intestinal tube.—[*Anatomical and Pathological Observations.*

### *Disputed Period of Gestation.*

To the Editor of the *Lancet*:

SIR,—I should be much obliged if yourself, or some of your numerous correspondents, could throw some light upon this case, which involves the welfare, almost existence, of a young and at present a deserted child;—

Two men, A and B, had intercourse, unknown to each other, with a young woman of delicate health; and after many years, she was delivered of a female child, nine calendar months and three days after sexual intercourse with A, and nine calendar months less five days after similar intercourse with B; or at the end of 279 days after intercourse with A, and at the end of 271 days after the intercourse with B,—that is, a period of eight days elapsed between the periods of intercourse with the two men; and the woman had no female ailment in the meantime, and it is not believed she knew any other man. She went her full time, had a good labour, and produced a fine healthy girl; had a plentiful supply of milk, and had better health during her pregnancy and suckling than at any other time. She, however, suckled her child too long, got excessively low and

nervous, it is believed worried herself as to which of the two men was the father of her child, and has since died.

During her last illness, she said that she always thought that the child must be the child of A., as she had once before miscarried by him, and had great affection for him, and her feelings made her think it was his; but that she did not know, as the time was beyond nine calendar months, (she entertaining the opinion that a woman could not go beyond nine calendar months.)

These circumstances have now become known to both A and B, and both refuse to maintain the child. A contends, that as the woman was not delivered until nine months and three days after connexion with him, it is physically impossible the child can be his. B contends that that has nothing to do with it; that 280 days, and not nine months at all, is the period of gestation; and that the child, being born at 279 days after the connexion with A, and only at 271 days after connexion with B, the probabilities were, that the child was the child of A, particularly coupled with the fact, that the woman had once before miscarried by A, and that she had stated, during her last illness, that her feelings told her it was the child of A.

There is no perceptible likeness of either of the men in the child, but a marked likeness of the mother.

Either of the men would maintain the child if he could be satisfied he was the father of it; and in the hope that you or your correspondents will kindly give such information upon the subject that may satisfy one of them, I remain, Sir, your constant reader,

London, April 1847.

GILBERT SMITH.

### PART III.—MONTHLY PERISCOPE.

*On the frequency of the Pulse, &c., of the aged.*—Dr. Pennock has instituted quite a number of observations on the pulse and respiration of the aged. The pulses of 170 men were observed, the aggregate of whose ages is 10,895, and that of the pulsation, 12,211. The respirations were counted in 146 instances, the total number of inspirations being 3045.

|                             |                   |
|-----------------------------|-------------------|
| The medium age is therefore | 64·09 years-      |
| The medium pulse            | 71·83 per minute. |
| The medium respiration      | 20·51 “ “         |

Ratio of respiration to pulsation, as 1 : 3·51

The pulses of 203 females was noted, the aggregate of whose ages is 14,326, and that of their pulses 15,838. The respiration was counted in 143 individuals, and its aggregate is 3,154.

|                        |                   |
|------------------------|-------------------|
| The medium age is      | 70·57 years.      |
| The medium pulse is    | 78·02 per minute. |
| The medium respiration | 22·06 “ “         |

Ratio of respiration to pulse, as 1 : 3·53



From the preceding facts and researches, which appear to have been carefully observed, it is evident that the frequency of the pulse of the aged is much greater than that usually assigned to it; whilst that of the respiration is equal to that generally admitted in reference to the adult of middle age.—[*American Journal Med. Sciences.*]

*Case of Doubtful Sex.*—Dr. Harris (*Am. Journ. Med. Sciences*) reports a case of doubtful sex, the subject of which is now living in Mecklinburg County, Virginia.

“Ned, a slave and house servant, wearing man’s apparel, is about eighteen years of age and probably five feet eight or nine inches high; and though not corpulent, is rather robust than otherwise. His head is large, with a coarse masculine face, wide mouth, thick lips, feminine voice, and a chin entirely destitute of beard. His skin is soft and delicate, with upper and lower extremities well formed and rounded, with the exception of his feet, which resemble very much the males of the African race. Thus far, however, his general appearance presents nothing very remarkable, or anything to excite doubts as to his sexuality. His shining ebony skin and rounded limbs, are not uncommon with negro boys, trained up as house servants among the luxurious livers of the South. But on opening his vest and shirt bosom, there are presented two large and well developed protuberant mammæ, having all the external characteristics of the breast of a healthy well-formed young woman. His neck, shoulders and chest partake likewise of this feminine character, having the soft and voluptuous outline of the female. On examining the external genital organs, which, by the way, are exhibited with marked reluctance, a strange and anomalous appearance is presented. The pubis is large, prominent, and covered with hair as in the female, and but for the conspicuous projection of a dwarfish-looking penis, about an inch long in the usual situation of that organ, the creature would at once be pronounced a woman. This penis is naturally formed in every respect, and eminently endowed, as he informed me, with virile sensibility. Immediately below it is a cleft or fissure running back as in the female organ, to the perineum, the sides of which are formed of thick folds of skin, resembling somewhat the scrotum, and shaded with long hair, representing tolerably well the external labia of the female. No testicles can be found. On separating the thighs the fissure is found to be from an inch to an inch and a half deep, smooth at the bottom and exactly in the situation of the vagina. The cavernous portions of the penis may be distinctly felt through the walls of the cavity near the bottom. The membrane lining it appears, in fact, to be only a continuation of the outward skin, but is more soft and delicate; without, however, any of the characteristics of the vaginal mucous membrane. Pressing the finger on the bottom it yields so readily, as to induce a belief that there is a cavity within, the outlet to which is merely closed up by the skin or membrane stretched

across the bottom of the fissure. But the anomaly does not stop here. This singular creature has been regularly menstruating for three or four years *through the penis*, attended in its inception and progress, by all the symptoms which commonly characterize the catamenia in young females. So well marked are the returns of this monthly discharge by the usual disturbance of the system, that the elder members of the family are never at a loss to determine when he is under its influence. As in most females in every station of life, there is likewise at such periods a shrinking from observation, and the constant exercise of a sleepless vigilance in preventing exposure. The amount or character of the discharge has never been clearly ascertained, but from his own imperfect account of it, and the evidences furnished by his linen, it differs not very materially either in quantity or quality from that of a young woman.

*Statistics of Mortality following the operation of tying the Carotid Arteries and Arteria Innominata.*—In the July number of the American Journal of the Medical Sciences, Dr. Norris has presented some interesting tables, which demonstrate that the dangers resulting from the ligature of these important vessels are much greater than is generally supposed. In thirty-eight cases in which the carotid was tied for the relief of aneurism, twenty-two recovered and sixteen died. Of these last, two died from inflammation of the sac; one from inflammation of the brain; five from hemorrhage; one from spasm of the glottis; two from apoplexy and congestion of the brain, and one from exhaustion. In four cases, the cause of death is not mentioned.

Of thirty cases in which the ligature was rendered necessary by wounds, fifteen were cured, and fifteen died. In eighteen cases, the ligature was applied previous to, or at the time of the extirpation of tumors. Of these six died. In forty-two cases the carotid was tied with a view to arrest the flow of blood to erectile tumors of the head or face, or of firm tumors of the jaw, maxillary sinus, or neck. Of these cases thirteen died. Of these, one died from ulceration of the tumor; four from hemorrhage; one from convulsions; one from inflammation of the brain; one from phlebitis of the internal jugular; one from lock-jaw; one from inflammation of the chest; two from long continued constitutional disturbance occasioned by disease, and one from apoplexy. In six cases the operation was performed for the removal of cerebral affections, all of which terminated favorably. In fifteen instances the ligature was applied according to Bradsor's method for the cure of aneurism, and four died. From these tables it appears that of one hundred and forty-seven cases in which the carotid was ligated that ninety-three survived the operation, and fifty-four died, showing a mortality of more than one-third. The ligation of the arteria innominata has been performed in eight cases, and in every instance the termination was fatal.

*Treatment of Ulcers by Firing.*

To the Editor of the Lancet:

SIR,—In consequence of having lately observed in your journal several communications relating to the use of the method called “firing,” by Dr. Corrigan, I am induced to call the attention of your readers to another method of applying dry heat, which I have repeatedly witnessed in the practice of M. Malgaigne at the Hôpital de Clinique.

This method is chiefly useful in procuring cicatrization of unhealthy ulcers of the skin, such as are left after the evacuation of the pus of buboes. The heat is applied by heating to redness one of the numerous irons used for actual cautery in the Paris hospitals, and holding it over the sore at such a distance as to produce an agreeable sensation of warmth to the part. In proportion as the iron cools, it is carried nearer and nearer, until, at last, it may be entrusted to the patient himself to hold, with instructions to continue approaching the iron to the ulcer as the iron cools.

I have not seen this method of treating obstinate ulcers employed anywhere else but in the wards of M. Malgaigne, although, from the excellent effects I witnessed from its use, I think it is deserving of being more generally tried. The first visible effect of the application is the assumption of a cleaner appearance by the sore, then a shining white pellicle of lymph spreads over the surface, and frequently within twelve hours of the first application, cicatrization has made some progress around the edges of the sore. In two cases I noted the complete cicatrization of unhealthy looking ulcerations resulting from large buboes in the groin, in eighteen hours.

Notting Hill, Jan. 1847.

ROBERT BARNES, M. B.

*Physical Sign of Pneumonia in the Apex of the Lungs.*—Dr. Wm. Boling (American Journal) has suggested a sign by which the existence of pneumonia in the apex of the lungs may be ascertained. He says:—“This is a fine mucous or crepitant rhonchus, seemingly seated in the larynx, loud enough to be heard distinctly at the distance of two or three feet from the patient, and so *persistent*, that it is not removable, or but momentarily, by any effort to expectorate which the patient may make, while at the same time there are present none of the signs of bronchitis or laryngitis. Though it is exceedingly annoying to the observer to hear it, because it impresses him with the belief that it is distressing to the patient, and he looks with a feeling rather of impatience for an attempt, by an effort to expectorate, for its removal; the patient seems perfectly indifferent to its presence, which would not be the case were it really produced by the presence of a small quantity of tenacious mucus in the larynx itself. The sound, then, is only seemingly produced in the larynx, for on applying the stethoscope immediately under or just above the clavicles, it will be discovered to proceed from the apex of one or the other lung, which will be found the seat of inflammatory action. It would seem that the sound there produced in the pulmonary vesicles, must be conveyed



by the larger bronchial ramifications, numerous and superficial at this point, to the larynx, where, in consequence of the thinness of the tube, or rather the thinness of its covering, and its proximity to the surface, the deceptive impression of its production in this organ, from the presence of a small quantity of viscid mucus, is created.

It is the indifference of the patient to the presence of the sound, but still more especially its *persistence*, which constitutes its peculiar and distinctive feature, and upon which its value as an evidence of pneumonia commencing in the apex of the lung depends. In other affections of the lungs and air passages, more especially in bronchitis, we may have a somewhat similar sound produced in the larynx itself, by the play of the passing air through a small quantity of viscid mucus there collected; but under such circumstances, it is removable by coughing, or an effort to expectorate, and once removed may not return again, or only after a considerable interval, when a fresh collection of mucus has taken place. The patient, too, does not manifest the same indifference in regard to its presence, but the mucus producing it soon excites an effort for its removal."

---

*Vomiting caused by relaxation of the Abdominal Parietes; bandage; cure.*—M. Greppo relates the case of a woman whose abdominal parietes were considerably relaxed in consequence of pregnancy. Various remedies had been unsuccessfully employed against the habitual vomiting by which she was exhausted. M. Greppo applied a bandage, and the vomiting disappeared, but returned whenever the bandage was removed.

This fact demonstrates clearly the origin of certain cases of obstinate vomiting which are combated in vain by every imaginable method, and the efficiency of the most simple mode when it is addressed directly to the cause of the accident. How many errors would be avoided in medicine if the connection of symptoms with their causes could always be appreciated as clearly as in this case.

[*Translated from Bulletin Thérapeutique*, May, 1847.]

---

*Injection of Nitrate of Silver in Acute Colitis.*—We frequently meet in very young infants with a particular form of diarrhœa caused by an acute and always superficial inflammation of the mucous membrane of the large intestine, the small intestine remaining perfectly healthy. This diarrhœa in its most simple form is ordinarily unattended by fever, and can generally be distinguished by particular signs from the catarrhal inflammation of the small intestine. Various remedies, particularly opium and its different preparations, are employed in such cases, frequently, it is true, with good effect, but they are almost always uncertain.

Professor Trousseau, appreciating the utility of the topical and substitutive medication whose action and power are always in some degree under the control of the physician, conceived the idea of employing in colitis this medication, by administering injections of the

nitrate of silver, so that it might come in immediate contact with the inflamed mucous membrane. The treatment has been generally happy, and meets every day with new success. It is important, however, that it should be employed with great care and not inopportunately, as for example in cases where the phlegmasia is confined to the small intestine. The following case shews the advantage of this treatment, and the course to be adopted.

An infant of 15 months was brought into the ward Sainte-Julie. The constitution was tolerably robust, and the health had been good until within the two last months, when it had been weaned and nourished by improper food. During this time it had been subject to diarrhœa; the evacuations were numerous, (8 or 10 per day,) of very slight consistence, of a deep green color, without any mixture of yellowish matter, and often preceded by violent colic; the abdomen was painful upon pressure, in the direction of the colon, and scarcely any fever existed. In this state the infant was brought to the hospital. The following injection was prescribed:—Cristalized nitrate of silver  $\frac{4}{5}$  of a grain; Water about a  $\frac{1}{2}$  pint. An injection of simple lukewarm water was first administered, and after it returned bringing away the matter which had covered the surface of the intestine, the injection of the nitrate of silver was given in an ordinary pewter syringe. On the first day the evacuations were reduced from ten to four. The injection was repeated, and on the second day there were only two evacuations, of a yellowish color and ordinary consistence, and the colic had disappeared. The patient left the hospital perfectly cured.—[*Ibid.*]

*Chlorate of Potassa, employed externally in Cancerous Ulcers.*—In our last number we mentioned the happy application which Dr. Hunt has made of the chlorate of potassa to the treatment of the gangrenous ulcers of the mouth of infants. Dr. Tedeschi has recently tried successfully the same remedy in a case of cancerous ulcer of the face. The following is his account of the application and of its results. A man aged 26 years, of a scrofulous diathesis, had upon the superior lip and the wing of the nose an ulcer of about one square inch in extent, with elevated and callous margins; the glands of the neck were engorged and painful. A great number of remedies, both internal and external, had been employed in vain—the flowers of zinc, the muriate of lime, the decoction of hemlock, the deuto-chloride of mercury, the red oxide of mercury ointment, the aqua phagedenica, the arsenical powder, &c. After three months thus uselessly expended, M. Tedeschi employed the chlorate of potassa in the following manner. He applied to the ulcer lotions made by dissolving 130 grains of the salt in about 5 ounces of water, continuing the internal use of emollient decoctions and of iodine preparations. In the course of a few days the ulcer presented an evident amelioration; the margins were less elevated, the suppuration became healthy, and in twenty days a good cicatrix was formed. The

glandular engorgements gradually disappeared, and in less than two months the cure was complete. This fact is of such a nature as to encourage new attempts.—[*Ibid*.

*Hemostatic Property of Secale Cornutum*.—We have seen in No. 9 of the ward St. Lazare a man of 45 years of age, of a vigorous constitution, but laboring under considerable debility and even extreme anemia, in consequence of bleeding piles. According to the statement of the patient he had been much afflicted for several years with hæmorrhoidal tumors which were frequently protruded during defecation, and with the *scæces* he discharged a sufficient quantity of blood to produce the exhaustion under which he was then suffering.

M. Martin Solon put the patient upon a tonic regimen, and after having employed unsuccessfully the extract of rhatany and other articles, he prescribed six, eight, and then nine grains of *secale cornutum*, to be taken four times per diem. The discharge of blood ceased immediately, defecation became more easy, and in three weeks the patient left the hospital perfectly cured.—[*Ibid*.

*Introduction of Air into the Veins during the Operation of Tracheotomy*.—The occurrence of this dreadful accident during an operation of tracheotomy is an unusual fact, to which it is important to call the attention of practitioners.

A female, by occupation a mattress maker, and about 50 years of age, was attacked, in January, 1847, by vague pains and sensations of uneasiness, soon followed by pains in the larynx; deglutition was embarrassed, and a frequent cough brought up often small threads of blood. On the 3d of March, being attacked by an intense dyspnœa, she was admitted into the Hospital Beaujon, in the service of M. Bouvier, who, believing tracheotomy urgently necessary, consigned the patient to M. Robert. The respiration was exceedingly difficult and presented the characters assigned to œdematous inflammation of the superior extremity of the pharynx. Inspiration was long, sonorous, and excessively laborious. Expiration, on the contrary, was prompt and easy. The pulse was very small and frequent, the countenance pale, the skin covered with a cold and clammy sweat, and the anxiety of the patient was extreme. M. Robert believed it to be his duty to perform tracheotomy in all haste. A vertical incision having been made downwards from the laryngeal projection through the skin, the sub-cutaneous cellular tissue and the superficial cervical aponeurosis were divided; but at this moment an anastomotic branch between the two anterior jugular veins having been divided, a very acute sound of aspiration was heard in the wound while the patient was making an inspiratory effort, and immediately afterwards, during expiration, a considerable quantity of venous blood with many bubbles of air escaped with a gurgling sound from the left lip of the incision. M. Robert immediately applied his finger upon this point; but while causing the finger of an assistant to be substituted for his own, in



order that he might continue the operation, a new sound was heard, followed by the same reflux of venous blood, and immediately the patient, exclaiming that she was dying, became pale and remained almost inanimate. While an assistant compressed more exactly the lips of the wound, the surgeon hastened to finish the operation. The incision of the trachea having been made with all possible celerity, he introduced a canula into its cavity.

The patient continued in a state of syncope; cold water was dashed upon her face; she was exposed in a current of air, and exciting frictions were made upon her chest; after some instants she made a slow and protracted inspiration; a second followed after a short interval; the pulse revived, and the skin became slightly warm. During the entire day the woman preserved a certain degree of prostration, and it was only by degrees that these serious symptoms disappeared.

As we perceive, this case, which we have transcribed with all its details, can leave no doubt of the reality of the introduction of air into the veins. If the patient did not succumb, it was owing, doubtless, to the small calibre of the vein which had given admission to a very small quantity of air. The first introduction did not seem to produce much disturbance; the second caused very serious accidents; another inspiration would probably have made death inevitable. We have cited this interesting case in order to put practitioners upon their guard against a similar accident. The extreme difficulty of the respiration by accumulating the black blood in the veins increases their volume and renders the introduction of air very easy whenever an incision made into a greatly distended vessel empties it of the blood which it had contained before it has time to return to its normal dimensions. We would be almost tempted in such cases, when the respiration is so greatly embarrassed, to cut down to the trachea directly, in order to re-establish at once the respiration, and thus remove that congestion of the veins which has the double inconvenience of rendering their lesion more inevitable and of increasing the danger of the operation.—[*Ibid.*]

---

*Substitute for the Vapour of Ether to annul sensation during operations.* By Dr DAURIOL.—At midsummer, when vegetation is at its height, solanum nigrum, hyoscyamus niger, cicuta minor, datura stramonium, lactuca virosa, are gathered, and a sponge is plunged in their juice freshly expressed. The sponge is then dried in the sun, the process of dipping and drying is repeated two or three times, and the sponge is then laid up in a dry place.

When the sponge is required for use, it is soaked for a short time in hot water; afterwards it is placed under the nose of the person to be operated upon, who is quickly plunged into sleep, more or less deep, according to the susceptibility of his nervous system. The operation may then be proceeded with without any fear that the patient has any sensation of pain. He is readily aroused from the stupor by a rag dipped in vinegar, and placed to his nose.

M. Dauriol records five cases in which he has successfully employed this means of bringing about insensibility during operations.

[*London Lancet*, from *Am. Journ. Med. Sci.*

*The Action of Scammony.*—M. Rayer has recently tested the action of this medicine in his wards at La Charitié Hospital, Paris. He has decided that it is neither a *drastic* nor *hydragogue* purgative. In his hands its action was mild, it was easy of administration, and if any thing it rather proved itself *cholagogue*, for the discharges were not serous, but yellowish from the increased quantity of bile. He gave it in from 4 to 30 grains in a single dose enveloped in unfermented bread, and at 4 o'clock in the morning. In cases of constipation or wherein purgation was indicated, it generally produced from two to seven evacuations in the space of three or four hours. It possessed no special effect over dropsies.—[*Journ. des Connaissance Médico-Chirurg.*

*Death of the Mother—Delivery of the Child by the Cæsarian section: it lives.*—M. De Pelayo, in the *Anales de Cirugia* of Madrid, says, that on the 8th February, 1847, he was called to a woman aged 30, who was in labour. During the progress of the case, she suddenly exclaimed I am lost, and died. Without delay, and assisted only by a female, the Doctor performed the cæsarian operation, and in five minutes after the death of the mother he extracted a small female infant. By blowing in its mouth and using frictions to the chest and spine, she began to breath, and eight days afterwards was doing remarkably well.

This woman was not married until the day of her accouchment, and her husband thus in the space of a few hours, passed successively through the positions of bachelor, married man, widower and father.—[Translated from *Gaz. Médicale de Paris*.

#### PREScriptions.

*For Constitutional Syphilis.* By M. GIBERT, of the St. Louis Hospital.—Take, Iodide of Mercury 2 grains; Iodide of Potash 100 grains; Gum Arabic Powder 10 grains; Honey enough to make twenty pills. Dose—two pills before breakfast.

*For Gonorrhœa.*—By M. PONS Y GUIMERA.—Catechu 2 drachms, dissolved in 5 ounces of distilled water. Inject into the urethra and retain it a minute and a half.

*For Syphilitic Eruptions of the Skin.* By M. CAZENAVE, of the St. Louis Hospital, Paris.—Protoiodide of Mercury 10 grains; Liqueurice powder 30. Make twenty pills. Dose—one to four pills in twenty-four hours.

Protoiodide of Mercury 2 ℥; Liqueurice powder 4 ℥. Make forty pills. To be given as above. He recommends this preparation of mercury as high as 4 grs. *per diem*. It should never be combined with opium.



## MEDICAL INTELLIGENCE.

*To our Readers.*—In our next number we intend to begin the publication of such of the reports and other proceedings of the late National Medical Convention, as may be of interest to the Profession. This duty would have been sooner performed, but a corrected copy of the proceedings of that body, did not reach us in time to extract any thing for the present number of the Journal. In our next we propose publishing the code of Medical Ethics which was adopted unanimously by the Convention, and which must prove of vast utility to physicians as embodying ample regulations for professional intercourse by which all differences may be adjudicated. We have many treatises on Medical ethics, but it required the adoption of a code suited to the profession in America, by some competent body to give efficiency to it. This has been done by the late Convention, and in our next number we will place their work before our readers.

*Medical Miscellany.*—By the *Medicinal Collegium* of Prussia, no apothecary in the kingdom can dispense any prescription of a physician containing a poisonous article, beyond its *maximum* dose, without the Doctor expressly states the condition requiring it.——At a recent trial at Essex in England, it appears a man by the name of Bentley, had strangled at least twenty-four horses in various parts of that country. His object was *gain*, for though sold ostensibly to dealers in horse-flesh for dogs, yet they are often disposed of for *human food*.

METEOROLOGICAL OBSERVATIONS, for June, 1847, at Augusta, Ga. Latitude 33° 27' north—Longitude 4° 32' west Wash. Altitude above tide 152 feet.

| JUNE | Sun Rise. |           | 4 P. M. |           | WIND. | REMARKS.                        |
|------|-----------|-----------|---------|-----------|-------|---------------------------------|
|      | Ther.     | Bar.      | Ther.   | Bar.      |       |                                 |
| 1    | 66        | 29 75-100 | 88      | 29 75-100 | w.    | Fair—flying clouds.             |
| 2    | 70        | " 75-100  | 90      | " 75-100  | w.    | Fair, do. [40-100.              |
| 3    | 70        | " 74-100  | 90      | " 68-100  | w.    | Fair, do. rain at 10, p. m.     |
| 4    | 70        | " 69-100  | 81      | " 69-100  | s.    | Showery, 15-100.                |
| 5    | 69        | " 74-100  | 86      | " 72-100  | s.    | Showery.                        |
| 6    | 68        | " 79-100  | 84      | " 75-100  | w.    | Showery.                        |
| 7    | 70        | " 77-100  | 81      | " 82-100  | N. E. | Cloudy.                         |
| 8    | 62        | " 90-100  | 80      | " 88-100  | S. E. | Fair.                           |
| 9    | 62        | " 90-100  | 82      | " 90-100  | E.    | Cloudy.                         |
| 10   | 62        | " 83-100  | 82      | " 72-100  | S. E. | Cloudy.                         |
| 11   | 70        | " 60-100  | 83      | " 59-100  | w.    | Cloudy—rain last night 75-100.  |
| 12   | 69        | " 65-100  | 82      | " 67-100  | w.    | Fair.                           |
| 13   | 63        | " 68-100  | 82      | " 70-100  | S. W. | Showery—blow.                   |
| 14   | 68        | " 65-100  | 90      | " 65-100  | S. W. | Fair—blow—rain 65-100.          |
| 15   | 66        | " 66-100  | 85      | " 70-100  | N. W. | Fair. [15-100.                  |
| 16   | 64        | " 72-100  | 88      | " 77-100  | w.    | Fair—storm at 7, p. m.—rain     |
| 17   | 70        | " 81-100  | 88      | " 82-100  | w.    | Fair.                           |
| 18   | 72        | " 85-100  | 84      | " 85-100  | N. E. | Cloudy.                         |
| 19   | 68        | " 87-100  | 80      | " 85-100  | S. E. | Cloudy—rain at night, } 65-100. |
| 20   | 69        | " 74-100  | 79      | " 69-100  | S. E. | Rain,                           |
| 21   | 63        | " 71-100  | 80      | " 75-100  | N. W. | Fair.                           |
| 22   | 63        | " 79-100  | 80      | " 80-100  | N. E. | Cloudy.                         |
| 23   | 63        | " 80-100  | 66      | " 81-100  | N.    | Rain, 1 inch.                   |
| 24   | 63        | " 81-100  | 80      | " 82-100  | S. E. | Rain, 30-100.                   |
| 25   | 68        | " 85-100  | 80      | " 85-100  | S. E. | Flying clouds—sprinkle.         |
| 26   | 70        | " 87-100  | 86      | " 90-100  | S. E. | Do. do.                         |
| 27   | 71        | " 90-100  | 86      | " 90-100  | S. E. | Cloudy—thunder, &c.             |
| 28   | 71        | " 84-100  | 81      | " 80-100  | S. E. | Cloudy—thunder, &c.             |
| 29   | 72        | " 68-100  | 90      | " 69-100  | S. W. | Do. sprinkle.                   |
| 30   | 71        | " 54-100  | 72      | " 59-100  | N.    | Cloudy—sprinkle.                |

But 4 entire Fair days. It rained on 16 days. Quantity of Rain 4 inches and 5-10. Wind East of N. and S. 13 days. West of do. 13 days.



# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—SEPTEMBER, 1847.

[No. 9.]

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE XXXIII.

*Cases of Convulsions and other Nervous Affections, during Pregnancy, Parturition and the Puerperal state.* By JOSEPH A. EVE, M. D., Prof. of Obstetrics, &c., &c., in the Medical College of Georgia.

Of all the diseases to which pregnant, parturient, or puerperal women are liable, there is none more frequent in its occurrence, more terrific in its invasion, or more truly dangerous in its results, than convulsions, and consequently none that requires to be met with more promptness and decision, or combatted with more boldness and energy; it is therefore of the very first importance that every practitioner, however young and inexperienced, should be thoroughly informed, that he may be prepared to meet such dangerous emergencies. His reliance must be on his own resources; for should he wait for the counsel or assistance of others, the favorable opportunity may be lost: then any efforts, however well directed, will not avail, and it will only remain for him to witness sufferings that he cannot relieve, and destruction that he cannot avert.

My object in the following pages is to give some details of my own practice and to make some comments thereon, with the hope of being able, in some degree, to benefit my younger professional brethren, and particularly to oblige the former pupils of our Medical College, who have kindly and frequently expressed a desire to have our views on certain subjects in a more permanent form, than oral instruction. We are induced the more readily to yield to their request, because we remember with gratitude their patient attention to our efforts to instruct them, and because we feel the same desire to serve them now, as before.

It is my design to avoid, as far as practicable, all theoretical discussion, to confine myself to details of my own practice, and to make such deductions as may be legitimately drawn from the facts. But it is not my intention to restrict myself to cases which properly come under the head of puerperal convulsions, for whilst some of these shall be omitted to prevent the unnecessary and tiresome repetition of cases in all respects identical, and some that were not seen until they were beyond the reach of medicine; other cases will be included, in which convulsions, although imminently threatened, were averted, and some other nervous affections which it is hoped will not be deemed altogether irrelevant or devoid of interest, as they may serve to throw some light on the subject under consideration. It may however be proper to remark that in all the cases omitted, the result was favorable, except in two, which occurred at a considerable distance in the country, in one of which the patient was moribund and in the other, in a desperate condition, before they were seen.

It would be much easier, and more in accordance with the course usually pursued, to present my views first, and then to refer to authorities and to adduce cases in support of the positions assumed; but an opposite procedure is preferred, not only because it is more in obedience with the dictates of the inductive philosophy, the most certain, rational and profitable method of investigating any subject; but because most of my opinions being the result of personal observation, it seems most in order to state the facts observed, and then the conclusions deduced from them.

The cases will generally be stated in the most concise manner; for whilst it may be proper to be sufficiently particular in some, to develop fully the plans and principles of treatment adopted, it will be tiresome to descend to the same minuteness in all.

After presenting a summary of cases, I will give my views of the nature and treatment of puerperal convulsions, and refer to those cases in confirmation of the opinions entertained.

The term *Puerperal Convulsions* shall be used, according to the application made by most obstetric authors, as comprising all cases of convulsions, occurring not only during parturition and the period immediately subsequent to it, but at any time during pregnancy.

Cases of puerperal convulsions may be divided into those which occur before the termination of the eighth month, those which occur any time after the eighth month or which anticipate labour, those which occur during labour, and those which take place after delivery.



*Cases occurring before the termination of the eighth month.*

CASE I. Mrs. B. M., a lady of nervous temperament, small stature, but large head, highly intellectual and accomplished, subject to determination of blood to the head, long before marriage, from too close application to study, about 18 years of age, six months advanced in her second pregnancy, suffered during the night of the 13th April, 1843, with an intense headache, which continued to increase until daylight, when she was seized with a violent convulsion. On my arrival, one hour after, she had a second convulsion, she was immediately bled to the extent of making a decided impression on her pulse, her feet were placed in a hot mustard bath, cold water poured on her head from a height, and sinapisms applied to her extremities and along the course of the spine. She remained composed until 12 o'clock, M., when she had another convulsion, quite as severe as either of the preceding: she was again bled, and the warm pediluvia, cold dash to the head, sinapisms, &c., repeated, her hair was cut off and ice applied to her head during the intervals of pouring the cold water. About 6, P. M., she had another, but much less violent convulsion. A scruple of calomel was administered as soon as it could be swallowed, and its operation promoted by the sulphate of magnesia and purgative enemata.

This patient remained free from disease and comparatively comfortable until the morning of the 18th, when labour pains came on and she expelled a foetus evidently some days dead, the death doubtless caused by the convulsion. From this time she continued gradually to regain her health and strength.

The following year, this lady became pregnant again, and suffered exceedingly from various nervous affections, such as painful spasmodic seizures of the muscles of the arms, followed by a most distressing numbness of the hands and arms, partial paralysis of the tongue with an inability to articulate distinctly. Her sufferings at times were indescribably severe. Great apprehension was entertained that she would have convulsions, when parturition should come on, if not during gestation. But the most careful attention was given to her diet, to the state of her bowels and to exercise. She was induced to take a ride or walk every afternoon; she was bled once, took calomel two or three times, and saline laxatives whenever there was a tendency to constipation. Plethora of the sanguine system and too great accumulation of nervous excitability were thus prevented, and notwithstanding she suffered, so frequently and intensely during



pregnancy, she went her full time, and had a natural and rapid labour and a prosperous convalescence. Previous to the supervention of the convulsion, her face, hands and arms, feet and ankles were considerably swollen.

CASE II. Mrs. R., a lady of sanguine temperament, of remarkably large and robust frame, inclining to obesity, about 30 years of age, six months advanced in gestation, had been for some days complaining of abdominal pains, resembling colic, for which she took the sulphate of morphia. On the morning of November 17th, 1840, she took a large portion without medical advice, in all probability a grain or more: not very long after taking this dose, she was seized with a violent convulsion, which soon resulted in profound coma.

My friend, Dr. Garvin, was also called to this patient. She was bled to a decided effect upon her pulse; cold water poured from a height upon her head; sinapisms applied to her spine and extremities; her feet placed in a hot mustard bath, and purgative enemata administered. In about two hours she recovered her speech and her senses so far as to understand and answer questions; she was threatened with a return of convulsions through that day and night, and did not have any recollection of what passed for forty-eight hours. She took a dose of calomel, the day she had the convulsion and for several days subsequent, her bowels were acted on by magnesia, salts, oil, &c. She was also bled again on the 18th. After this her health became good, but she felt no foetal movements. On the 15th December, about one month after the convulsion, labour pains came on and she expelled a foetus, from its appearance, some time dead. There was no recurrence, nor even a threatening of convulsions during labour.

CASE III. Mrs. C., 19 years of age, of highly nervous temperament and slender frame, six months advanced in her first pregnancy, had become, contrary to her ordinary habit, very fleshy and plethoric. This lady had on the night of the 1st August, 1845, a most intense headache—her eyes had a peculiar wildness of expression and her countenance indicated extreme suffering;—she was bled immediately to the extent of thirty-two ounces, with prompt and decided relief: an active cathartic was prescribed the next day, and she continued tolerably comfortable, with however occasional spells of headache of milder grade, until the afternoon of the 7th, an interval of six days, when during the absence of her husband from home she had a convulsion; but as none except servants were present, her husband,

himself a physician, and myself, could not learn any thing satisfactory as to its nature and degree of violence, and were even left in doubt as to the fact of her having had a convulsion, as she had recovered from it before we saw her; we did not therefore adopt any very active plan of treatment. After waiting some time, there being no return, I left her in charge of her husband. Not long after my leaving the house, she had a violent convulsion. Dr. C. immediately took away not less than forty ounces of blood. Sinapisms were applied to her spine and extremities; cold water poured on her head from a height; her feet placed in a hot mustard bath, and as soon as she could swallow, a large dose of calomel was administered. She had only one more convulsion, and that much milder than the second. She continued in feeble health, without foetal movements, until the 26th, nineteen days after the convulsions, when parturient pains came on, and she expelled a foetus that presented transversely, and from its appearance, sometime dead: after this she regained good health. The following year she became pregnant, and passed happily through gestation and parturition.

CASE IV. Mrs. S. G., a lady of decidedly sanguine temperament, very robust and plethoric, 34 years of age, the mother of eight children, six months advanced in pregnancy, after suffering pain and fulness of the head, on the 25th July, 1845, had a violent convulsion, which terminated in insensibility; her husband immediately opened a vein in her arm with his penknife, and took between thirty and forty ounces of blood: sinapisms, &c., were applied. She recovered her senses in forty-five minutes. A scruple of calomel was administered, to be followed in four hours by sulphate of magnesia.

The day after, she was quite comfortable, having had no return of convulsions. She was directed to live chiefly on vegetable diet; to obviate constipation, to which she was much disposed, by gentle laxatives when required, and to take exercise daily in the open air. By adopting this course, she passed happily through pregnancy and parturition, and gave birth to a fine healthy child. This lady had had convulsions in her last confinement, which will be subject of case 9th, coming under the head of Convulsions anticipating labour.

CASE V. Mrs. S., a lady of nervous temperament, of very small and delicate stature, but more plethoric than usual, aged 26, married four years, had had several abortions about the second month, was now five months advanced in pregnancy. Abortion had been threatened, two weeks, by a sanguine discharge and intermittent pains.

Mrs. S. was detained in Augusta by her situation, having arrived here by rail-road on the 2d February, on her way to her residence some hundred miles distant. The night of the 12th she complained of severe pain in the abdomen, supposed to be colic, for which she took, without medical advice, a table-spoonful or two of brandy and twenty or thirty drops of laudanum. Early next morning, the 13th, she complained of intense headache, and at 8 o'clock, A. M., was seized with a violent convulsion. My first visit was in a half hour after the convulsion—intelligence was very imperfectly restored: her pulse was full and strong; I endeavored to anticipate another convulsion by a copious abstraction of blood; but it was too late;—twenty ounces were taken;—convulsions continued to occur at intervals of about a half hour, notwithstanding the vigorous employment of the most powerfully active means, practiced in the preceding cases, until she had seven, when the pulse becoming again more developed and tense, sixteen ounces more of blood were taken half-past 11 o'clock, A. M., after which the convulsions ceased,—her mind became much clearer, her countenance and expression much more natural, and she remained free from pain and comparatively comfortable, until about 12 o'clock at night, when labour came on, which she passed through without the slightest indication of convulsions. In this case, although miscarriage had evidently commenced a fortnight before the supervention of the convulsions, (as was evinced by uterine pains and sanguine discharge,) the womb remained quiescent during the convulsions, and for twelve hours after, until her system had somewhat recovered from the shock occasioned by them, nor was there, as I have remarked, during the agitation of labour, which lasted eight hours, the slightest tendency to a return of convulsions.

CASE VI. Mrs. D., a lady of nervous temperament, of large stature, but feeble health, about 32 years of age, had had one living child and several miscarriages, and was now six months advanced in pregnancy. On the morning of December 22d, 1842, had a convulsion, from which she recovered promptly. Neither the state of her head nor her pulse indicated the loss of blood. The usual remedies, with the exception of blood-letting, were employed, and in addition an emetic and antispasmodics, as assafoetida, &c.; were administered. Convulsions continued to recur at irregular intervals until she had eight. In the evening, after a suspension of some hours, a  $\frac{1}{2}$  grain of the sulphate of morphine was administered with the view of preventing their recurrence during the night. The next morning she



was comfortable, but had no recollection of what had passed the day before. Dr. Dugas saw this patient in consultation after the second convulsion, and fully concurred in withholding the lancet, and pursuing the course above stated: This lady soon recovered her usual health, but did not perceive any motion of the fœtus, which however was not expelled until the 2d January, 1843, one month after, bearing the evidences of having been a long time dead.

This is the only case of convulsions either during pregnancy or parturition that I could regard as hysteric, the only one in which bloodletting has not been clearly indicated.

CASE VII. Mrs. D., a lady of sanguine, nervous temperament, aged twenty years; health generally delicate, but at the time of attack more plethoric than usual; about 7 months advanced in pregnancy, about 7 o'clock P. M., Feb. 16th, 1842, had a violent convulsion followed by insensibility. As she resided at a distance of eight miles, several hours had elapsed before she was seen; she was still in profound coma. Bloodletting was carried to the fullest extent that prudence would justify—the most energetic application of cold to the head and sinapisms to the spine and extremities were repeatedly put in practice during the night. About daylight, she began to speak incoherently and unintelligibly at first, but soon recovered her senses. Her condition when I left her, was as comfortable and promising as could have been expected.

On the morning of the 20th, being called to her again, I found her labouring under intense pneumonia, caused by exposure to extreme cold in her reduced state, having been removed, contrary to my express orders, into a most uncomfortable room without a chimney, during a very inclement spell of weather. The recent abstraction of blood precluded all farther depletion: a blister was applied—emetic tartar, warm pediluvia, and all such means and appliances as her symptoms indicated and her condition admitted, were employed. She could not be regarded otherwise than in a desperate state.

On the 22nd, at 9 o'clock, A. M., the pneumonia had not abated, and labour had commenced. Before the expulsion of the fœtus, she began to sink. A forlorn hope was indulged that the system might rally when the uterus was relieved of its contents—the fœtus was promptly extracted by the crotchet and the placenta quickly removed; but in vain.

There was no renewal of the original disease—no convulsive movement distorted her dying face. As respects the convulsion, this

case may fairly be considered a recovery;—the premature delivery and death are justly attributable to the subsequent pneumonia.

### *Cases anticipating Labour.*

These constitute a less numerous, but a more dangerous class of cases. According to my observation they occur generally during the ninth month and can very rarely be arrested until after delivery.

CASE VIII. Mrs. W., of nervous temperament, and small, feeble stature, 16 years of age, 8 months advanced in her first pregnancy, contrary to her ordinary habit had become very fleshy and plethoric. March 4th, 1844, feeling very unwell, she had visited a friend a mile from home, in hope to be benefitted by the walk—in the evening she was too sick to return, and suffered all night from headache, which became intolerable in the morning, on which account I was called to her.

Before she could be bled, a violent convulsion came on—she was bled as soon as practicable, to the extent of thirty-two ounces, and of making a decided impression on the pulse. Sensibility was partially restored in a short time. But another convulsion ensued, another and another, in rapid succession, through the day, each one rendering the coma more and more profound. They continued to recur at longer intervals during the night, notwithstanding the employment of cold to her head, sinapisms to her spine and extremities, the administration of calomel and purgative enemata, and the abstraction of blood, carried to an extent far beyond what I have ever known in any other case. I bled her twice copiously, but as I was unavoidably detained away a considerable portion of the time by an obstetric case, she was visited in my absence by two of my professional friends, who judging, and perhaps correctly, from the violence and continuance of the convulsions, that she had not lost blood enough, each bled her once or twice more. Cups were also applied to the occiput and neck. The last general bleeding which was from the temporal artery, I was informed, exercised a decided influence over the convulsions as respects their frequency. In the afternoon, by examination per vaginam, the os tincæ was found beginning to dilate. Early in the night, the dilatation was still inconsiderable. At 8 A. M., next day, about 24 hours from the first convulsion, the os tincæ being dilated, and the head resting on the perineum, the fœtus was extracted by the forceps dead, as might reasonably be calculated on after so many convulsions. A very intelligent lady, who

was present all the time, counted forty-one convulsions, the greatest number I have ever known: it is possible, though not probable, that she may have made a mistake, but her veracity is unimpeachable. Although absent more than half the time, I witnessed a considerable number. After the removal of the fœtus, there was no further convulsion, but she continued extremely ill for many days, her pulse scarcely perceptible and innumerable frequent. Three days elapsed before she could speak at all, and five more her speech was wild and incoherent. It was not until the tenth day that she regained intelligence sufficient to realize her situation. After this her convalescence was as rapid as could have been expected; she was, however, for a year, more subject to headache than formerly. The following year, May 25th, she was confined again, having passed through pregnancy and parturition without the slightest indication of convulsions. Every care was taken during gestation to prevent sanguine plethora and an undue accumulation of nervous excitability by exercise, diet, and attention to the state of her bowels.

CASE IX. Mrs. S. G., the subject of case 4, during the night of the 22d September, 1844, suffered intensely from headache, which increased in the morning, attended with dazzling and flashes of light. At breakfast, she said the butter-cup appeared like a ball of fire, and immediately was seized with a violent convulsion. Her residence being some miles distant, nearly two hours passed before she was seen. I arrived in time to witness the third convulsion—abstracted fifty ounces of blood immediately; directed sinapisms to spine and extremities; applied cold water to her head from a height; administered twenty-five grains of calomel, and prescribed warm mustard pediluvia, purgative enemata, &c. In about two hours, took away again from sixteen to twenty ounces of blood. After the second blood-letting, Drs. Hook and P. F. Eve arrived, and assisted me in the management of this case. In the afternoon the womb began to act. About sundown, the os tincæ being pretty well dilated, it was determined, in consultation, depletion having been carried as far as prudence would justify, to administer ʒiij. vin. ergot, and remove the fœtus by the forceps. While placing the patient in a proper position for the introduction of the forceps, the tenth convulsion came on, during which the fœtus was expelled dead. Sometime during the night, while the attendants were changing her position, she had another convulsion, making in all eleven. Seidlitz powders and salts were prescribed the next day to promote the operation of the calo-



mel. Intelligence was sufficiently restored to understand and answer questions; but she did not wake up to the reality of her situation until the fourth day, when she became very much excited at the thought of having given birth to her child, in a state of unconsciousness, and not knowing what had passed for several days; she, however, soon became composed, and possessing an excellent constitution rapidly regained her health and strength. The ensuing year this lady became pregnant, and when six months advanced, had another convulsion, which constitutes case 4th.

CASE X. Dec. 31st, 1846, called to visit Mrs. R., a lady of nervous lymphatic temperament, aged 30 years, eight months advanced in her third pregnancy, much more fleshy and plethoric than usual, found her suffering from a violent headache which had existed several days. Notwithstanding the intense cephalalgia and the manifest signs of great plethora, her pulse was rather feeble and below eighty per minute. The depressed state of the pulse, doubtless, depended on the condition of the nervous system. She was bled at 3 o'clock, P. M., to thirty-two ounces, with immediate relief to her head; during the flow the pulse became more developed. A dose of calcined magnesia and warm sinapized pediluvia were prescribed.

At 6, P. M., three hours after the bleeding, she had, from the description of those present, a violent convulsion. A half hour after, I found her in a state more like natural sleep than coma, from which she was aroused by the puncture of the lancet, made for a second abstraction of blood, which did not exceed twenty ounces. Intelligence was apparently restored, but she had scarcely any recollection of what had passed that whole day, even before she had the convulsion. She was so blind, that evening and the next day, Jan. 1st, that she could not discern the light of a candle held near her eyes, except for a short time, immediately after pouring cold water on her head, which was repeated hourly for a considerable time, twenty-four to thirty-six hours, and afterwards at longer intervals. Her bowels were acted on by calomel, magnesia, salts, &c., but such was their torpor that immense doses were required. Her sight gradually improved through the 2d and 3d, and by the 4th, was perfectly restored; her pulse also became natural and her system apparently free from all morbid action. During the night of the 4th labour came on, and early the morning of the 5th, she was safely delivered of a living child, small and feeble at first, but it has survived and grown rapidly. During labour, there was not the slightest disturbance of the brain or nervous system.

This case might be said not to come properly under the head of convulsions, anticipating labour, inasmuch as there was an interval of four days between the convulsion and the labour; but it is confidently believed that the labour was induced prematurely by the convulsion, and that, had this patient not been most opportunely bled, a short time before and almost immediately after it, there would have been a repetition of the convulsions, which would have ushered in labour during their continuance, to the almost certain destruction of the child, and great peril of the mother. This is, at least, the only case I have known of a convulsion in the ninth month without a repetition, and without the induction of labour; the convulsions continuing to recur with irresistible pertinacity until delivery has been effected, and sometime afterward.

CASE XI. Nancy, a negro woman, the property of Dr. J. B. Walker. Early in the morning of September, 23d, 1845, this patient was found in a convulsion: it was not known when they commenced or how many she had had. Dr. P. F. Eve, soon after being called, found on examination that labour had commenced. It was impossible to determine which had precedence, the convulsions or the labour; but as the os tincæ was very little dilated and rigid, it is most likely the convulsions had occurred first. She was seven or eight months pregnant. The Doctor bled her as freely as her pulse and the state of the system demanded, and applied sinapisms extensively to her spine and extremities.

A consultation was held at 12, M. Turning was impracticable, even if deemed expedient. Emetic tartar, in divided portions, was prescribed with the hope of promoting dilatation as well as of arresting the convulsions. Farther bleeding was inadmissible. Her bowels had been operated on during the forenoon by oil, taken the day before.

At 3, P. M., her symptoms becoming more alarming, although the dilatation was very little, if at all, increased, it was determined, if possible, to deliver by the crotchet. Through courtesy, the delivery was kindly committed to me. It was rendered very difficult by the mobility of the head, the unsteadiness of the patient and the want of dilatation of the os tincæ, and farther embarrassed by the protrusion through it of the arm and umbilical cord. It occupied about twenty-five minutes, no convulsion occurring during its performance, and only one more, some hours afterwards.

After the delivery, ʒij. wine of ergot was administered to promote

uterine contraction and prevent hemorrhage. At 8, P. M., we found her in a state of great jactitation, pulse feeble and frequent; she could drink, and articulate a few words. Fifty drops of laudanum were given, and in two hours twenty-five more.

Sept. 24th—8, A. M. She had slept some during the night, appeared much better, was tranquil, pulse 80 per minute; large blisters on her thighs having failed to draw last night, were reapplied and drew well; appeared better all day. At 8, P. M., she was more restless, and her pulse increased in frequency. Five grains of calomel and a half grain of opium, every three hours.

25th—8, A. M. Patient was worse; breathing hurried, pulse more frequent: gave the calomel alone, and applied blisters to arms and neck. She became constantly worse through this day and the following night, and died about daylight the next morning.

Permission could not be obtained to make a *post mortem* examination. This patient had had convulsions in a confinement some years before, and her health appeared to be feeble at the time of the last attack.

### *Convulsions during Parturition.*

CASE XII. Mrs. W., a lady of nervous temperament and delicate frame, 17 years of age, had taken little or no exercise for some months past, and become more than usually plethoric. At 10, P. M., Dec. 1846, labour commenced so gently that, although a primipara, assistance was not called for some hours. The labour progressed as favorably as could have been reasonably desired. At daylight, the os tinæ was fully dilated, the head resting on the perineum. She complained of some headache, but not sufficient to excite alarm, especially as the pulse was under eighty per minute and soft and the labour was so far and so well advanced. Bloodletting did not appear to be indicated. When a speedy and happy termination was expected, she was seized with a convulsion. A vein was immediately opened;—my friend, Dr. P. F. Eve, entered the room in time to conduct the bleeding whilst I attended to the delivery. The employment of the forceps was considered and declined, as it was believed that the delivery would be accomplished without instrumental aid, in as short a time and with much less hazard to mother and offspring. The child was born alive, in from twenty to thirty minutes. During the delivery of the placenta, which was hastened by the introduction of the hand, as it was deemed expedient to disburden the womb



thoroughly of its contents as soon as possible, she had another convulsion. Between one and two hours after the second, she had a third convulsion. A pint more of blood was taken, and 25 drops of laudanum given, after which she slept naturally; when she awoke, a scruple of calomel was given, to be followed by salts, in four hours. Cold water to her head, sinapisms, &c., were also employed, as in other cases.

Her convalescence was prompt and satisfactory. This is the only instance in which convulsions have occurred during labour, in a case in my hands. I have seen cases under the management of midwives, said to have supervened during labour, but nothing very certain could be learned of their previous history.

### *Convulsions after Parturition.*

CASE XIII. Mrs. G., temperament not well marked, about 23 years of age, primipara, had been for some months subject to an affection of the head, attended with temporary loss of speech, confusion of thought and sense of numbness on one side, for which I was consulted about two months previous to labour. She was advised to confine herself to a light diet, to take as much exercise in the open air as she could without inducing pain, and to use gentle laxatives whenever the state of her bowels required them; it was also advised that she should be bled promptly if she should have another attack. She had only one slight and very transient return, for which she was not bled.

At 7 o'clock A. M., 20th May, 1845, labour which had commenced about midnight moderately, and progressed slowly, became very severe, attended with headache, which excited considerable apprehension in my mind, as she had complained so much of her head during gestation. She would have been bled for this headache; but her pulse did not warrant it, and I feared it might so depress the energies of her system as to retard labour. Cloths dipped in cold water and ice were applied to her head. At 10 A. M., she gave birth to a large and healthy child. The danger I hoped was now passed. Ice was ordered to be kept to her head as long as she had any headache, which after vomiting had become very much relieved. At 1 P. M., she had a convulsion and was thought to be flooding, but upon examination, there was not much, if any, more than the natural quantity of lochial discharge, which was very thin, exhibiting very little, if any, coagula.

She was first visited by Dr. Cross, who cupped over the epigastri-

um. Her bowels were freely operated on by salt enemata. Sinapisms, &c. were also applied. She had another convulsion at half-past 2 o'clock, another at 4 o'clock, and a fourth at 6 o'clock. Previous to this, intelligence returned in the intervals. She had another in a few minutes, and several more in rapid succession, until 7, P. M.  $\frac{1}{4}$  gr. sulph. morph. was given, after which she had no convulsion until half-past 10, P. M. Sinapisms were frequently applied. Enemas of the watery solution of assafoetida and wine of ergot, were administered. Cups were frequently applied to the back of the neck and base of the brain and temples. Cold water was frequently poured on her head, and in the intervals, bladders of ice applied. Calomel and oil were administered. Drs. Carter and Ford were called in consultation, at 8, P. M. Convulsions recurred at short intervals until 12, when  $\frac{1}{2}$  g. morphine was given, after which there was no more convulsion. The patient continued ill all night, her pulse becoming more feeble and frequent.

About 6, A. M., 21st, she appeared to be sinking; but between 8 and 9, A. M., she seemed somewhat to revive—had some little appearance of intelligence, swallowed water. In a short time, again she became worse, and expired at 11, A. M.

The convulsions in this case must have depended on a pre-existing morbid state of the brain. Unfortunately, permission could not be obtained to make a post-mortem examination. Her complexion, although unhealthy was not that generally indicative of anemia, but such was the state of her pulse and the thinness of her blood, that it was not proposed by any of the physicians in consultation to practice general bloodletting.

[TO BE CONTINUED.]

---

ARTICLE XXXIV.

*On Purpura Hemorrhagica.* By I. P. GARVIN, M. D., Professor of Materia Medica, &c., in the Medical College of Georgia.

Hemorrhage, whether from accidental or other causes, is generally alarming, and demands prompt relief. This remark applies with peculiar force to those hemorrhages which depend upon a depraved state of the system, as the nature of the depravation is usually obscure, and the treatment uncertain. Among such diseases, probably the most alarming and intractable, yet fortunately the most rare, is

hemorrhagic form of *Purpura*. So rare indeed is this affection, that many old practitioners have never met with a case. From this cause, and from the obscurity which prevails as to the true nature of morbid changes in the blood, but little progress has yet been made in determining the most judicious treatment. Having met with four cases of this disease, we have determined to give the results of our observation, in the hope that they would prove not unacceptable to the readers of the *Journal*, though they should suggest nothing novel either in its pathology or treatment.

The term *Purpura* is generally confined to "an efflorescence of small distinct purple specks and patches, attended with general debility, but not always with fever." Under this name some writers include every variety of petechial eruption and spontaneous ecchymoses. We design however only to notice that form which is unattended with fever or other acute disorder.

This disease has not been noticed by any of the ancient writers. Riverius is said to have been the first to allude to it, which he did in a publication made in 1674. Very little attention was directed to it until the latter part of the last century, since which time it has been accurately described by Willan, Bateman and others. Beyond a mere description, however, very little progress has been made, and at this day its true nature is involved in as much obscurity, and its treatment is nearly as uncertain as it was half a century ago.

The description of this affection by Bateman is highly accurate, so much so indeed, that we cannot do better than to quote it entire. "In *purpura Simplex* (the form of the disease in which hemorrhage is wanting) there is an appearance of petechiæ without much disorder of the constitution, except languor and loss of the muscular strength, with a palè or sallow complexion, and often with pain in the limbs. The petechiæ are most numerous on the breast, and on the inside of the arms and legs, and are of various sizes, from the most minute point, to that of a flea-bite, and commonly circular. They may be distinguished from recent flea-bites, partly by their more livid or purple color, and partly because in the latter there is a distinct central puncture, the redness around which disappears on pressure. There is no itching nor other sensation attending the petechiæ. *Purpura hemorrhagica* is considerably more severe; the petechiæ are often of a larger size and are interspersed with vibices and ecchymoses, or livid stripes and patches, resembling the marks left by the strokes of a whip or by violent bruises. They commonly appear first on the legs,



and at uncertain periods afterwards, on the thighs, arms, and trunk of the body; the hands being more rarely spotted with them, and the face generally free. They are usually of a bright red color when they first appear, but soon become purple and livid; and when about to disappear, they change to a brown or yellow hue; so that as new eruptions arise, and the absorption of the old ones slowly proceeds, this variety of color is commonly seen in the different spots at the same time. The cuticle over them appears smooth and shining, but is not sensibly elevated; in a few cases, however, the cuticle has been seen raised into a sort of vesicle, containing black blood. This more frequently happens in the spots which appear on the tongue, gums, palate, and inside of the cheeks and lips, when the cuticle is extremely thin, and breaks from the slightest force, discharging the effused blood. The gentlest pressure on the skin, even such as is applied in feeling the pulse, will often produce a purple blotch, like that which is left after a severe bruise.

The same state of habit which gives rise to these effusions under the cuticle produces likewise copious discharges of blood, especially from the internal parts which are defended by delicate coverings. These hemorrhages are often very profuse, and not easily restrained, and therefore sometimes prove suddenly fatal. But in other cases they are less copious; sometimes returning every day at stated periods, sometimes less frequently, and at irregular intervals; and sometimes there is a slow and almost incessant oozing of the blood. The bleeding occurs from the gums, nostrils, throat, inside of the cheeks, tongue and lips, and sometimes from the lining membrane of the eyelids, the urethra, and the external ear; and also from the internal cavities of the lungs, stomach, bowels, uterus, kidneys and bladder."

The disease sometimes appears without any marked premonitory derangement, the hemorrhage manifesting itself before the patient is aware of the existence of the petechial efflorescence. Such was the case in two of the instances which have come under our notice. In most cases, however, the disease has been preceded by much languor and debility, and pain in the limbs, with considerable derangement of the general health. There is a form of the disease known as *Purpura Febrilis*, a case of which we have never seen, in which the pulse is frequent and the skin dry and hot, but in the form of which we are speaking, the pulse is generally feeble and somewhat frequent and vibratory. Pains or some uneasiness are often felt in various parts of the body, particularly in those parts from which the hemorrhage

is about to occur. The appetite is not much impaired, but the bowels are almost always in a torpid condition.

The duration of the disease is exceedingly uncertain. It has been known to continue for months, and even years. In one of our cases it disappeared in ten or twelve days—in another it continued for three weeks; but a relapse was several times threatened, during the course of the succeeding year. In another case, hemorrhage occurred but twice, and the petechiæ and ecchymoses disappeared in about a fortnight. In the fourth case the patient succumbed on the sixth day.

Autopsic examinations have been made of subjects who have fallen victims to this disease, but they have shed but little, if any light upon its nature. No lesions have been found which could satisfactorily explain the phenomena of the disease. Petechial spots were found on the surface of all the internal organs, some of which evinced considerable vascular turgescence. It has been suggested that the disease may result from tenuity of the blood—from dilatation of the mouths of the superficial extremities of the minute arteries—from increased impetus of the blood rupturing vessels which were healthy—from obstructions in healthy vessels, without increased impetus—and from a combination of two or more of these causes acting simultaneously or successively. Parry supposed that it was produced by “over distention of certain blood-vessels, arising probably from their relative want of tone, or the due contraction of their muscular fibres.” Plumb believes that it originates from “tenderness of the coats of the minute vessels which give way from the ordinary impetus of the blood. “That this tenderness is the result of deficient nourishment in the superficial vessels,” he says, “is equally clear; and it may fairly be suspected that such deficiency is consequent on congestion in the hepatic and gastric circulation.” McIntosh thinks that the disease is possibly owing to general functional derangement of many organs which at last produces changes upon the blood; and that it may probably be owing to disease primarily seated in the lungs. We think there can exist no reasonable doubt that the most striking and uniform morbid change is that presented by the blood, from whatever cause this change may result. Although some cases have been reported in which blood drawn by the lancet coagulated strongly and exhibited a sizzly appearance, in a large majority of instances, the blood has evinced great fluidity, and when it did coagulate, it was in “a soft, tremulous mass.” In Dr. Gardiner’s case, “the blood

first drawn coagulated imperfectly, and on the following day resembled a tremulous jelly with a greenish surface interspersed with brownish spots. What was discharged afterwards, was more like turbid lymph, or a fluid in which some reddish coloring matter was suspended." We have no hesitation in expressing the opinion that the disease depends upon a depraved state of the blood, caused probably by functional derangement of the organs of assimilation. In some of the cases which we have seen, such a state of these organs evidently existed, and in every case, the blood was remarkably thin.

Purpura most frequently manifests itself in females and persons who have not attained the age of puberty, but no age is entirely exempt from its attacks. It is most frequently observed in persons of a delicate habit—employed in sedentary occupations, in crowded places, and nourished with a bad diet, or exposed to the action of fatigue or other depressing causes. It is said sometimes to occur as a sequela to other diseases, as measles, small-pox, &c. It must not, however, be concealed, that it occasionally attacks persons who have not been subjected to the action of any of the causes just mentioned, and who are apparently in tolerable health.

There is usually very little, if any difficulty in forming a correct diagnosis. The existence of the red or purple spots, which do not disappear under pressure, together with the occurrence of hemorrhage, give the complaint very marked characteristics.

Some diversity of opinion prevails as to the best mode of treating Purpura, originating from the frequent failures of every plan which has been proposed. Bleeding has been recommended by Parry, and some others. Doubtless a few cases have occurred in which this remedy was employed with advantage, or at least without obvious injury, but that it is at all admissible in most cases, we do not believe. The derangement in the general system which usually exists, and the anemic condition which soon supervenes, forbid the employment of the lancet. A case may occasionally occur, in which the health of the subject is but slightly impaired, and there have as yet been no profuse hemorrhages, when venesection would not prove hurtful, but its employment should be restricted to such cases, and even then it must be used with great caution. A medical friend has just mentioned to us the case of a gentleman laboring under Purpura, who was bled for a catarrhal affection by a medical man, under whose charge he was accidentally placed, and the consequences were fatal. In our objections to the lancet in this disease, we believe that we



are fully sustained by most practitioners who have treated the disease.

Among the remedies which enjoy the most reputation, are active cathartics, frequently repeated. We have used them with decided benefit, but we think reliance should not be placed upon them to the exclusion of other remedies. Rayer, and many others, employ calomel combined with jalap, whilst others give a preference to castor oil in union with the oil of turpentine. This last article has attracted considerable attention, and enjoys some reputation as a purgative in this disease. In the case of a child of seven years of age, the only case ever seen by Eberle, he found benefit from small doses of turpentine together with the nitrate of silver, twenty drops of the former to a quarter of a grain of the latter, every six hours.

The use of the mineral acids will be found of great advantage, particularly the sulphuric, which is among the best hemostatics that we are acquainted with. In one case, a comparatively mild one it is true, we effected a cure with the diluted sulphuric acid, aided by frequent laxatives.

Some of the best remedies have, in our opinion, been too much overlooked: we allude to chalybeates. Tonics we are aware have been fully tested, without any satisfactory result, and their use is generally condemned; but the preparations of iron are not merely tonics; they obviously effect changes in the blood, and to these changes we attribute their efficacy in this, as in some other diseases. We have treated two cases successfully with these remedies. In one very alarming case, the precipitated carbonate of iron was given in as large and often repeated doses as the stomach would bear, followed by frequent cathartics. Under this treatment, marks of amendment were soon visible, and the patient soon recovered. Several slight relapses which afterwards occurred, were promptly arrested by the iron alone. We have great faith in its efficacy. The cases in which we would expect the least from it, are those which occur in subjects in good health, and presenting some vascular fulness.

Astringents, internal as well as external, are in frequent requisition for the hemorrhages which take place. We have employed the acetate of lead and other articles of established reputation as astringents, without their usual marked effects; still, when hemorrhages occur, we are compelled to resort to these remedies.

It may be laid down as a general rule, that the hemorrhages which accompany Purpura, are to be arrested by the same means that we

would employ to arrest such discharges from the same sources under other circumstances—internal astringents, &c., when the hemorrhage is from some inaccessible source, and cold, styptics, compression, &c. when these can be efficiently applied.

We have met with a few cases of the *Purpura simplex*. It always yielded quite readily to the use of laxatives, together with a free use of the diluted sulphuric acid.

---

## PART II.—REVIEWS AND EXTRACTS.

### ARTICLE XXXV.

*Proceedings of the National Medical Conventions held in New York May, 1846, and in Philadelphia May, 1847.*

There is no profession entitled to a higher place in the estimation of mankind, than that of Medicine. Among the contributors to science, the votaries of learning, and the enlightened philanthropists of every age, physicians have occupied a prominent place. For many ages, with Theology and the Law, Medicine was known as one of the learned professions. But whatever may have been its former rank or its present claims, it must be obvious to the most superficial observation, that it has undergone a gradual decadence, and at this time, in our own country at least, it has fallen from its high estate, and is looked upon by many, even of the intelligent, as a mere art which any dolt may easily acquire. Medical men have long seen and deplored this state of things, and have at length united in an effort to rescue their profession from the reproach which has fallen upon it. In the proceedings of the National Medical Conventions, which embodied a large amount of talent and respectability, we have before us the causes which in their view have brought about the present order of things, and the remedies which they propose for their removal. From these proceedings it is to be inferred that the Convention suppose the evils complained of, to arise principally from three causes: first, from the want of a suitable preliminary education among those who apply themselves to the study of Medicine; second, from the lowness of the standard of strictly medical acquirements, which is generally adopted by the Colleges; and third, from the failure on the part of these institutions, to require from those who seek their honors, a full conformity to that low standard.

---

That each of the causes enumerated contribute to lower the profession of Medicine cannot for a moment be doubted, although some diversity of opinion may prevail as to the part which each performs. Our own opinion is, that the want of a proper preliminary education is the most efficient of those enumerated in degrading the profession. When we speak of a proper preliminary education, we wish to be understood as going far beyond the recommendations of the Convention. "A good English education, a knowledge of Natural Philosophy and the elementary Mathematical Sciences, including Geometry and Algebra, and such an acquaintance, at least, with the Latin and Greek languages as will enable them to appreciate the technical language of Medicine, and read and write prescriptions," will do much to facilitate the acquisition of Medical Science, but it will not prove of very essential service in elevating one whose knowledge is thus limited, in the estimation of the intelligent and cultivated men of the land. We admit that with this, or with even something less, a man of good mind, and untiring perseverance, may become a useful and safe practitioner, but the people at large have no means of estimating his fitness to exercise the functions of his profession, but by his general intelligence, and acquaintance with those branches of knowledge with which well educated men are familiar. If his knowledge goes not beyond what is strictly professional, they will suppose him ignorant in that, or as is too frequently the case, they will deem Medicine itself as a mere art which requires neither learning nor intelligence for its successful application. This test is the only one which the unprofessional can apply, and we hesitate not to say that a man of general learning will do more to render the profession honorable in the public estimation, than one much superior in medical skill, but deficient in every other species of knowledge. How can a man of cultivated intellect respect either the physician or his occupation who betrays a gross ignorance of the very rudiments of school-boy learning. We may lengthen the collegiate course—add new branches of science to the curriculum, and adopt the most stringent measures to secure a more thorough instruction in the Medical Sciences, but the profession will never be respected as it should be, until the great body of physicians is composed of well educated men. In view, therefore, of these reasons, we would advocate a high standard of preliminary education as a requisite for the degree of Doctor of Medicine. It has been objected that such a course would induce great numbers of young men to engage in the practice without the degree. Be it so. The public



would learn the difference between these, and the thoroughly educated physician. Moreover, many young men of proper ambition, would be induced to acquire the requisite education even by their own unaided efforts, who now are contented to remain ignorant because ignorance upon these subjects is common. We do not agree with the Convention, however, in their recommendation that practitioners should not receive pupils into their offices, and the Colleges should not matriculate such as have not attained the standard of preliminary education they have prescribed. Many young men, we have known several such, could carry on their scientific and literary studies at the same time. It is quite a common occurrence in France, for young men engaged in the study of Medicine to devote a portion of each day to lectures, and other instruction in those departments of knowledge, without which they would not be eligible to the honors of the Medical profession. It will be sufficient, and indeed all that is practicable to require conformity to the prescribed standard, of those who seek the honors of the Colleges. We cannot make every practitioner a man of general learning, but we can require all to be such, who are honored with the Doctorate.

That the standard of medical education is too low, is a fact which no one is disposed to deny." It is certainly lower than in the most enlightened countries in Europe, and as a consequence a large portion of our medical practitioners are inferior to their foreign cotemporaries in the extent, and minuteness of their scientific knowledge. It is equally true, and indeed what might have been reasonably expected, that a large portion of those who are thus imperfectly educated, make no sufficient effort to supply the defect, and fail to keep pace with the improvements of the age. We therefore heartily concur in the sentiment that, "it is indispensable that the standard of medical education should be elevated." It may not in so considerable a degree increase the respectability of the profession, as would a high standard of preliminary education, but it would render it more worthy of public confidence. We believe, however, that the defect in the present system of medical education does not consist solely in a lack of instruction, but that the shortness of the period into which the whole amount of instruction is crowded, also exert a prejudicial influence. The report upon this subject justly remarks, "the shortness of the time devoted to the delivery of Lectures, we believe to be an evil of no small magnitude. It is next to an impossibility that the strongest intellect can receive, and well digest some half a dozen or more dis-

courses a day, embracing subjects which have oftentimes little or no immediate connection with each other. The mind becomes wearied with the multiplicity of its occupations, and the thoughts of to-day are forgotten in the constantly recurring duties of the morrow. A proper allotment of time cannot be given to that deep reflection which the importance of the subject demands, and without which no solid advancement can be made." For these reasons we approve of the extension of the course of Lectures, not only because new subjects may be taught, but because fewer lectures will occupy the attention of the student daily.

The Convention has not advised the introduction of new branches of science into the curriculum, if we except Medical Jurisprudence, which is now a distinct professorship in some few Colleges, and to some extent incidentally taught in all. There are doubtless some collateral sciences, instruction in which would add much value to the collegiate course, yet, under present circumstances, we think the Convention did well, in not requiring such branches to be taught.

Clinical instruction is also deemed by the Convention to be an indispensable element in a proper medical education. Of course they do not refer to that kind of clinical instruction to be derived from a case placed once or twice a week in a large amphitheatre, and surrounded by several hundred young men, many of whom are unavoidably at such a distance, as to be unable to distinguish the color of the patient's eyes. Such clinical instruction is a mere farce. In view of the fact, that in many of our cities, the hospitals and alms-houses are not under the direction of the Faculties of the Colleges, the Convention has not urged it as a prerequisite to graduation.

On the subject of dissection, the Convention says, "to enter into an argument to prove its absolute necessity, not only to the surgeon, but to the physician, would be a work of supererogation," and it is therefore very properly recommended that it be required of candidates for the degree, that they shall have *steadily* devoted three months to dissecting. It certainly speaks but little for the state of medical education in this country, that of the twenty colleges who reported their rules to the Convention, THIRTEEN do not require candidates to have dissected at all. We are pleased to say that the Medical College of Georgia is not among this number.

In relation to the influence which a failure on the part of the colleges to exact a full conformity to their own standards, exerts upon the character of the profession, and the remedy for the removal of

this evil, the Convention has expressed no opinion, but has referred the whole subject to the American Medical Association. But the two reports of the committee on the question of separating the business of teaching and licensing, doubtless embody the views of a large portion of that body. These reports alledge that the active competition of the Medical Colleges, and the desire to swell the number of their pupils, naturally produces a relaxation of their rules, and a consequent depreciation of the degree. To remedy this evil, it has been proposed to unite with the Faculties of the Colleges, medical gentlemen unconnected with any institution, and let a board thus constituted decide upon the application of candidates. This plan we deem objectionable. Whilst we admit that man is fallible, and that the promptings of interest, or friendship, may cause him sometimes to forget or disregard the responsibilities of his position, it is equally true that the same proclivity to evil may induce these new examiners to err upon the other side, and let professional rivalry or personal ill will influence their decisions. The experiment of requiring candidates for graduation to submit to an examination by persons unconnected with the faculty, we believe was made some years since in Charleston, but it did not succeed, and was soon abandoned. There seems to be quite an anxiety on the part of many members of the profession, to take from the colleges the power of conferring degrees, or in their own mode of expressing their idea, to separate the business of teaching from licensing. Whether the colleges will consent to any such arrangement, remains to be seen; but we believe that they will not. If an applicant complies with their regulations, and they are satisfied with his proficiency, it is their right, nay, more, it is their duty, to give him a testimonial to that effect. What is a Diploma, more than this? It is not a license, properly speaking—it is only so in States where some special enactment has made it such. A diploma from the Medical College of Georgia, cannot confer a right to practice medicine in any State of the Union except that in which it has been granted, unless the Legislatures of such State choose to make such diploma a license. If it is believed that the colleges graduate men who are not qualified to practice physic, let the proper authority in each State create boards of examiners, and require every one who desires to practice, to submit himself to their examination, whether he has a diploma or not. To such a plan, no College, we presume, would object.

Upon the whole, we are much pleased with the recommendations



of the Convention, and we doubt not that so much of them as is practicable, will eventually be carried out. We say eventually, because moderate as are the reforms proposed, they cannot be effected at once, but will require time and concert of action for their successful introduction. But that these changes will rescue the profession from its present position, and place it where it should be, we do not believe, although they will effect some good. In our country there is a deep-rooted prejudice against all privileges, and every science and art must make its way unaided by legislative enactments. The law gives no encouragement—it confers no privileges upon him who devotes every energy to improve the science of Medicine, but recognizes every empiric and ignorant pretender, as much as the man of science. Under such discouragements few are found to struggle for a high order of attainment, and many a young man who sat out with lofty aspirations and resolves, has yielded to their influence and settled down into indolence and indifference. We need expect no change in this respect. The evil is incident to our institutions. We may recommend what we please: every man who desires to do so, may enter upon the practice of Medicine, and the mass of the community will recognize him as a physician. In the Medical Colleges of the country the power alone resides to elevate the professional character. Let them impart fuller instruction, and establish a high standard of preliminary and medical education, to which every applicant for their honors shall be required strictly to conform, and though the medical profession will still continue to be incumbered with ignorant pretenders, the intelligent part of the community will soon rank them as they deserve, and will require as a prerequisite to their confidence, the possession of a Diploma from some respectable Medical Institution.

G.

---

*Code of Medical Ethics, adopted at the late Meeting of the  
National Medical Convention.*

---

## CHAPTER I.

OF THE DUTIES OF PHYSICIANS TO THEIR PATIENTS AND OF THE OBLIGATIONS OF PATIENTS TO THEIR PHYSICIANS.

### ART. I.—*Duties of Physicians to their Patients.*

§ 1. A Physician should not only be ever ready to obey the calls of the sick, but his mind ought also to be imbued with the greatness of his mission, and the responsibility he habitually incurs in its dis-

charge. Those obligations are the more deep and enduring, because there is no tribunal other than his own conscience, to adjudge penalties for carelessness or neglect. Physicians should, therefore, minister to the sick with due impressions of the importance of their office; reflecting that the ease, the health, and the lives of those committed to their charge, depend on their skill, attention and fidelity. They should study, also, in their deportment, so to unite *tenderness* with *firmness*, and *condescension* with *authority*, as to inspire the minds of their patients with gratitude, respect and confidence.

§ 2. Every case committed to the charge of a physician should be treated with attention, steadiness and humanity. Reasonable indulgence should be granted to the mental imbecility and caprices of the sick. Secrecy and delicacy, when required by peculiar circumstances, should be strictly observed; and the familiar and confidential intercourse to which physicians are admitted in their professional visits, should be used with discretion, and with the most scrupulous regard to fidelity and honor. The obligation of secrecy extends beyond the period of professional services; none of the privacies of personal and domestic life, no infirmity of disposition or flaw of character observed during professional attendance, should ever be divulged by him except when he is imperatively required to do so. The force and necessity of this obligation are indeed so great, that professional men have, under certain circumstances, been protected in their observance of secrecy, by courts of justice.

§ 3. Frequent visits to the sick are in general requisite, since they enable the physician to arrive at a more perfect knowledge of the disease,—to meet promptly every change which may occur, and also tend to preserve the confidence of the patient. But unnecessary visits are to be avoided, as they give useless anxiety to the patient, tend to diminish the authority of the physician, and render him liable to be suspected of interested motives.

§ 4. A physician should not be forward to make gloomy prognostications, because they savour of empiricism, by magnifying the importance of his services in the treatment or cure of the disease. But he should not fail, on proper occasions, to give to the friends of the patient timely notice of danger, when it really occurs; and even to the patient himself, if absolutely necessary. This office, however, is so peculiarly alarming when executed by him, that it ought to be declined whenever it can be assigned to any other person of sufficient judgment and delicacy. For, the physician should be the minister of hope and comfort to the sick; that, by such cordials to the drooping spirit, he may smooth the bed of death, revive expiring life, and counteract the depressing influence of those maladies which often disturb the tranquillity of the most resigned, in their last moments. The life of a sick person can be shortened not only by the acts, but also by the words or the manner of a physician. It is, therefore, a sacred duty to regard himself carefully in this respect, and to avoid all things which have a tendency to discourage the patient and to depress his spirits.

§ 5. A physician ought not to abandon a patient because a case is deemed incurable; for his attendance may continue to be highly useful to the patient, and comforting to the relatives around him, even in the last period of a fatal malady, by alleviating pain and other symptoms, and by soothing mental anguish. To decline attendance, under such circumstances, would be sacrificing to fanciful delicacy and mistaken liberality, that moral duty, which is independent of, and far superior to all pecuniary consideration.

§ 6. Consultations should be promoted in difficult or protracted cases, as they give rise to confidence, energy, and more enlarged views in practice.

§ 7. The opportunity which a physician not unfrequently enjoys of promoting and strengthening the good resolutions of his patients, suffering under the consequences of vicious conduct, ought never to be neglected. His counsels, or even remonstrances, will give satisfaction, not offence, if they be proffered with politeness, and evince a genuine love of virtue, accompanied by a sincere interest in the welfare of the person to whom they are addressed.

#### ART. II.—*Obligations of Patients to their Physicians.*

§ 1. The members of the medical profession, upon whom are enjoined the performance of so many important and arduous duties towards the community, and who are required to make so many sacrifices of comfort, ease, and health, for the welfare of those who avail themselves of their services, certainly have a right to expect and require, that their patients should entertain a just sense of the duties which they owe to their medical attendants.

§ 2. The first duty of a patient is, to select as his medical adviser one who has received a regular professional education. In no trade or occupation, do mankind rely on the skill of an untaught artist; and in medicine, confessedly the most difficult and intricate of the sciences, the world ought not to suppose that knowlege is intuitive.

§ 3. Patients should prefer a physician, whose habits of life are regular, and who is not devoted to company, pleasure, or to any pursuit incompatible with his professional obligations. A patient should, also, confide the care of himself and family, as much as possible, to one physician, for a medical man who has become acquainted with the peculiarities of constitution, habits, and predispositions, of those he attends, is more likely to be successful in his treatment, than one who does not possess that knowledge.

A patient who has thus selected his physician, should always apply for advice in what may appear to him trivial cases, for the most fatal results often supervene on the slightest accidents. It is of still more importance that he should apply for assistance in the forming stage of violent diseases; it is to a neglect of this precept that medicine owes much of the uncertainty and imperfection with which it has been reproached.

§ 4. Patients should faithfully and unreservedly communicate to



their physician the supposed cause of their disease. This is the more important, as many diseases of a mental origin simulate those depending on external causes, and yet are only to be cured by ministering to the mind diseased. A patient should never be afraid of thus making his physician his friend and adviser; he should always bear in mind that a medical man is under the strongest obligations of secrecy. Even the female sex should never allow feelings of shame or delicacy to prevent their disclosing the seat, symptoms and causes of complaints peculiar to them. However commendable a modest reserve may be in the common occurrences of life, its strict observance in medicine is often attended with the most serious consequences, and a patient may sink under a painful and loathsome disease, which might have been readily prevented had timely intimation been given to the physician.

§ 5. A patient should never weary his physician with a tedious detail of events or matters not appertaining to his disease. Even as relates to his actual symptoms, he will convey much more real information by giving clear answers to interrogatories, than by the most minute account of his own framing. Neither should he obtrude the details of his business nor the history of his family concerns.

§ 6. The obedience of a patient to the prescriptions of his physician should be prompt and implicit. He should never permit his own crude opinions as to their fitness, to influence his attention to them. A failure in one particular may render an otherwise judicious treatment dangerous, and even fatal. This remark is equally applicable to diet, drink, and exercise. As patients become convalescent they are very apt to suppose that the rules prescribed for them may be disregarded, and the consequence but too often, is a relapse. Patients should never allow themselves to be persuaded to take any medicine whatever, that may be recommended to them by the self-constituted doctors and doctresses, who are so frequently met with, and who pretend to possess infallible remedies for the cure of every disease. However simple some of their prescriptions may appear to be, it often happens that they are productive of much mischief, and in all cases they are injurious, by contravening the plan of treatment adopted by the physician.

§ A patient should, if possible, avoid even the *friendly visits of a physician* who is not attending him,—and when he does receive them, he should never converse on the subject of his disease, as an observation may be made, without any intention of interference, which may destroy his confidence in the course he is pursuing, and induce him to neglect the directions prescribed to him. A patient should never send for a consulting physician without the express consent of his own medical attendant. It is of great importance that physicians should act in concert; for although their modes of treatment may be attended with equal success when employed singly, yet conjointly they are very likely to be productive of disastrous results.

§ 8. When a patient wishes to dismiss his physician, justice and common courtesy require that he should declare his reasons for so doing.

§ 9. Patients should always, when practicable, send for their physician in the morning, before his usual hour of going out; for, by being early aware of the visits he has to pay during the day, the physician is able to apportion his time in such a manner as to prevent an interference of engagements. Patients should also avoid calling on their medical adviser unnecessarily during the hours devoted to meals or sleep. They should always be in readiness to receive the visits of their physician, as the detention of a few minutes is often of serious inconvenience to him.

§ 10. A patient should, after his recovery, entertain a just and enduring sense of the value of the services rendered him by his physician; for these are of such a character, that no mere pecuniary acknowledgment can repay or cancel them.

## CHAPTER II.

### OF THE DUTIES OF PHYSICIANS TO EACH OTHER, AND TO THE PROFESSION AT LARGE.

#### ART. I.—*Duties for the support of professional character.*

§ 1. Every individual, on entering the profession, as he becomes thereby entitled to all its privileges and immunities, incurs an obligation to exert his best abilities to maintain its dignity and honour, to exalt its standing, and to extend the bounds of its usefulness. He should therefore observe strictly, such laws as are instituted for the government of its members;—should avoid all contumelious and sarcastic remarks relative to the faculty, as a body; and while, by unwearied diligence, he resorts to every honourable means of enriching the science, he should entertain a due respect for his seniors, who have, by their labours, brought it to the elevated condition in which he finds it.

§ 2. There is no profession, from the members of which greater purity of character, and a higher standard of moral excellence are required, than the medical; and to attain such eminence, is a duty every physician owes alike to his profession, and to his patients. It is due to the latter, as without it he cannot command their respect and confidence, and to both, because no scientific attainments can compensate for the want of correct moral principles. It is also incumbent upon the faculty to be temperate in all things, for the practice of physic requires the unremitting exercise of a clear and vigorous understanding; and, on emergencies for which no professional man should be unprepared, a steady hand, an acute eye, and an unclouded head may be essential to the well-being, and even to the life, of a fellow creature.

§ 3. It is derogatory to the dignity of the profession, to resort to

public advertisements or private cards or handbills, inviting the attention of individuals affected with particular diseases—publicly offering advice and medicine to the poor gratis, or promising radical cures; or to publish cases and operations in the daily prints or suffer such publications to be made;—to invite laymen to be present at operations,—to boast of cures and remedies,—to adduce certificates of skill and success, or to perform any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular physician.

§ 4. Equally derogatory to professional character is it, for a physician to hold a patent for any surgical instrument, or medicine; or to dispense a secret *nostrum*, whether it be the composition or exclusive property of himself, or of others. For, if such *nostrum* be of real efficacy, any concealment regarding it is inconsistent with beneficence and professional liberality; and, if mystery alone give it value and importance, such craft implies either disgraceful ignorance, or fraudulent avarice. It is also reprehensible for physicians to give certificates attesting the efficacy of patent or secret medicines, or in any way to promote the use of them.

ART. II.—*Professional services of physicians to each other.*

§ 1. All practitioners of medicine, their wives, and their children, while under the paternal care, are entitled to the gratuitous services of any one or more of the faculty residing near them, whose assistance may be desired. A physician afflicted with disease is usually an incompetent judge of his own case; and the natural anxiety and solicitude which he experiences at the sickness of a wife, a child, or any one who by the ties of consanguinity is rendered peculiarly dear to him, tend to obscure his judgment, and produce timidity and irresolution in his practice. Under such circumstances, medical men peculiarly dependent upon each other, and kind offices and professional aid should always be cheerfully and gratuitously afforded. Visits ought not, however, to be obtruded officiously; as such unasked civility may give rise to embarrassment, or interfere with that choice, on which confidence depends. But, if a distant member of the faculty, whose circumstances are affluent, request attendance, and an honorarium be offered, it should not be declined; for no pecuniary obligation ought to be imposed, which the party receiving it would wish not to incur.

ART. III.—*Of the duties of physicians as respects vicarious offices.*

§ 1. The affairs of life, the pursuit of health, and the various accidents and contingencies to which a medical man is peculiarly exposed, sometimes require him temporarily to withdraw from his duties to his patients, and to request some of his professional brethren to officiate for him. Compliance with this request is an act of courtesy, which should always be performed with the utmost consideration for the interest and character of the family physician, and when exer-



cised for a short period, all the pecuniary obligations for such service should be awarded to him. But if a member of the profession neglect his business in quest of pleasure and amusement, he cannot be considered as entitled to the advantages of the frequent and long-continued exercise of this fraternal courtesy, without awarding to the physician who officiates the fees arising from the discharge of his professional duties.

In obstetrical and important surgical cases, which give rise to unusual fatigue, anxiety and responsibility, it is just that the fees accruing therefrom should be awarded to the physician who officiates.

**ART. IV.—Of the duties of physicians in regard to Consultations.**

§ 1. A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the only acknowledged right of an individual to the exercise and honours of his profession. Nevertheless, as in consultation the good of the patient is the sole object in view, and this is often dependent on personal confidence, no intelligent regular practitioner, who has a license to practice from some medical board of known and acknowledged respectability, recognized by this association, and who is in good moral and professional standing in the place in which he resides, should be fastidiously excluded from fellowship, or his aid refused in consultation when it is requested by the patient. But no one can be considered as a regular practitioner, or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology, and organic chemistry.

§ 2. In consultations no rivalry or jealousy should be indulged; candour, probity, and all due respect should be exercised towards the physician having charge of the case.

§ 3. In consultations the attending physician should be the first to propose the necessary questions to the sick; after which the consulting physician should have the opportunity to make such farther inquiries of the patient as may be necessary to satisfy him of the true character of the case. Both physicians should then retire to a private place for deliberation: and the one first in attendance should communicate the directions agreed upon to the patient or his friends, as well as any opinions which it may be thought proper to express. But no statement or discussion of it should take place before the patient or his friends, except in the presence of all the faculty attending, and by their common consent; and no *opinions* or *prognostications* should be delivered, which are not the result of previous deliberation and concurrence.

§ 4. In consultations, the physician in attendance should deliver his opinion first; and when there are several consulting, they should deliver their opinions in the order in which they have been called in. No decision, however, should restrain the attending physician from making such variations in the mode of treatment, as any subsequent

unexpected change in the character of the case may demand. But such variations and the reasons for it ought to be carefully detailed at the next meeting in consultation. The same privilege belongs also to the consulting physician if he is sent for in an emergency, when the regular attendant is out of the way, and similar explanations must be made by him, at the next consultation.

§ 5. The utmost punctuality should be observed in the visits of physicians when they are to hold consultations together, and this is generally practicable, for society has been considerate enough to allow the plea of a professional engagement to take precedence of all others, and to be an ample reason for the relinquishment of any present occupation. But as professional engagements may sometimes interfere, and delay one of the parties, the physician who first arrives should wait for his associate a reasonable period, after which the consultation should be considered as postponed to a new appointment. If it be the attending physician who is present, he will of course see the patient and prescribe; but if it be the consulting one, he should retire, except in case of emergency, or when he has been called from a considerable distance, in which latter case he may examine the patient, and give his opinion in *writing* and *under seal*, to be delivered to his associate.

§ 6. In consultations, theoretical discussions should be avoided, as occasioning perplexity and loss of time. For there may be much diversity of opinion concerning speculative points, with perfect agreement in those modes of practice which are founded, not on hypothesis, but on experience and observation.

§ 7. All discussions in consultation should be held as secret and confidential. Neither by words nor manner should any of the parties to a consultation assert or insinuate, that any part of the treatment pursued did not receive his assent. The responsibility must be equally divided between the medical attendants,—they must equally share the credit of success as well as the blame of failure.

§ 8. Should an irreconcilable diversity of opinion occur when several physicians are called upon to consult together, the opinion of the majority should be considered as decisive; but if the numbers be equal on each side, then the decision should rest with the attending physician. It may, moreover, sometimes happen, that two physicians cannot agree in their views of the nature of a case, and the treatment to be pursued. This is a circumstance much to be deplored, and should always be avoided, if possible, by mutual concessions, as far as they can be justified by a conscientious regard for the dictates of judgment. But in the event of its occurrence, a third physician should, if practicable, be called to act as umpire, and if circumstances prevent the adoption of this course, it must be left to the patient to select the physician in whom he is most willing to confide. But as every physician relies upon the rectitude of his judgment, he should, when left in the minority, politely and consistently retire from any further deliberation in the consultation, or participation in the management of the case.

§ 9. As circumstances sometimes occur to render a *special consultation* desirable, when the continued attendance of two physicians might be objectionable to the patient, the member of the faculty whose assistance is required in such cases, should sedulously guard against all future unsolicited attendance. As such consultation require an extraordinary portion both of time and attention, at least a double honorarium may be reasonably expected.

§ 10. A physician who is called upon to consult, should observe the most honorable and scrupulous regard for the character and standing of the practitioner in attendance: the practice of the latter, if necessary, should be justified as far as it can be, consistently with a conscientious regard for truth, and no hint or insinuation should be thrown out, which could impair the confidence reposed in him, or affect his reputation. The consulting physician should also carefully refrain from any of those extraordinary attentions or assiduities, which are too often practiced by the dishonest for the base purpose of gaining applause, or ingratiating themselves into the favour of families and individuals.

ART. V.—*Duties of physicians in cases of interference.*

§ 1. Medicine is a liberal profession, and those admitted into its ranks should found their expectations of practice upon the extent of their qualifications, not on intrigue or artifice.

§ 2. A physician, in his intercourse with a patient under the care of another practitioner, should observe the strictest caution and reserve. No meddling inquiries should be made; no disingenuous hints given relative to the nature and treatment of his disorder; nor any course of conduct pursued that may directly tend to diminish the trust reposed in the physician employed.

§ 3. The same circumspection and reserve should be observed, when, from motives of business or friendship, a physician is prompted to visit an individual who is under the direction of another practitioner. Indeed, such visits should be avoided, except under peculiar circumstances, and when they are made, no particular inquiries should be instituted relative to the nature of the disease, or the remedies employed, but the topics of conversation should be as foreign to the case as circumstances will admit.

§ 4. A physician ought not to take charge of, or prescribe for a patient who has recently been under the care of another member of the faculty in the same illness, except in cases of sudden emergency, or in consultation with the physician previously in attendance, or when the latter has relinquished the case or been regularly notified that his services are no longer desired. Under such circumstances no unjust and illiberal insinuations should be thrown out in relation to the conduct or practice previously pursued, which should be justified as far as candour, and regard for truth and probity will permit; for it often happens, that patients become dissatisfied when they do not experience immediate relief, and, as many diseases are naturally



protracted, the want of success, in the first stage of treatment, affords no evidence of a lack of professional knowledge and skill.

§ 5. When a physician is called to an urgent case, because the family attendant is not at hand, he ought, unless his assistance in consultation be desired, to resign the care of the patient to the latter immediately on his arrival.

§ 6. It often happens, in cases of sudden illness, or of recent accidents and injuries, owing to the alarm and anxiety of friends, that a number of physicians are simultaneously sent for. Under these circumstances, courtesy should assign the patient to the first who arrives, who should select from those present, any additional assistance that he may deem necessary. In all such cases, however, the practitioner who officiates, should request the family physician, if there be one, to be called, and, unless his further attendance be requested, should resign the case to the latter on his arrival.

§ 7. When a physician is called to the patient of another practitioner, in consequence of the sickness or absence of the latter, he ought, on the return or recovery of the regular attendant, and with the consent of the patient, to surrender the case.

§ 8. A physician, when visiting a sick person in the country, may be desired to see a neighbouring patient who is under the regular direction of another physician, in consequence of some sudden change or aggravation of symptoms. The conduct to be pursued on such an occasion is to give advice adapted to present circumstances; to interfere no farther than is absolutely necessary with the general plan of treatment; to assume no future direction, unless it be expressly desired; and, in this last case, to request an immediate consultation with the practitioner previously employed.

§ 9. A wealthy physician should not give advice *gratis* to the affluent; because his doing so is an injury to his professional brethren. The office of a physician can never be supported as an exclusively beneficent one; and it is defrauding, in some degree, the common funds for its support, when fees are dispensed with, which might justly be claimed.

§ 10. When a physician who has been engaged to attend a case of midwifery is absent, and another is sent for, if delivery is accomplished during the attendance of the latter, he is entitled to the fee, but should resign the patient to the practitioner first engaged.

#### ART. VI.—Of differences between Physicians.

§ 1. Diversity of opinion, and opposition of interest, may, in the medical, as in other professions, sometimes occasion controversy and even contention. Whenever such cases unfortunately occur, and cannot be immediately terminated, they should be referred to the arbitration of a sufficient number of physicians, or a *court-medical*.

As peculiar reserve must be maintained by physicians towards the public, in regard to professional matters, and as there exist numerous points in medical ethics and etiquette through which the feelings of

medical men may be painfully assailed in their intercourse with each other, and which cannot be understood or appreciated by general society, neither the subject matter of such differences nor the adjudication of the arbitrators should be made public, as publicity in a case of this nature may be personally injurious to the individuals concerned, and can hardly fail to bring discredit on the faculty.

#### ART. VII.—*Of Pecuniary Acknowledgments.*

§ 1. Some general rules should be adopted by the faculty, in every town or district, relative to *pecuniary acknowledgments* from their patients; and it should be deemed a point of honour to adhere to these rules with as much uniformity as varying circumstances will admit.

### CHAPTER III.

#### OF THE DUTIES OF THE PROFESSION TO THE PUBLIC, AND OF THE OBLIGATIONS OF THE PUBLIC TO THE PROFESSION.

##### ART. I.—*Duties of the profession to the public.*

§ 1. As good citizens, it is the duty of physicians to be ever vigilant for the welfare of the community, and to bear their part in sustaining its institutions and burdens: they should also be ever ready to give counsel to the public in relation to matters especially appertaining to their profession, as on subjects of medical police, public hygiene, and legal medicine. It is their province to enlighten the public in regard to quarantine regulations,—the location, arrangement, and dietaries of hospitals, asylums, schools, prisons, and similar institutions,—in relation to the medical police of towns, as drainage, ventilations, &c., and in regard to measures for the prevention of epidemic and contagious diseases; and when pestilence prevails, it is their duty to face the danger, and to continue their labours for the alleviation of the suffering, even at the jeopardy of their own lives.

§ 2. Medical men should also be always ready, when called on by the legally constituted authorities, to enlighten coroners' inquests and courts of justice, on subjects strictly medical,—such as involve questions relating to sanity, legitimacy, murder by poisons or other violent means, and in regard to the various other subjects embraced in the science of Medical Jurisprudence. But in these cases, and especially where they are required to make a post-mortem examination, it is just, in consequence of the time, labour and skill required, and the responsibility and risk they incur, that the public should award them a proper honorarium.

§ 3. There is no profession, by the members of which, eleemosynary services are more liberally dispensed, than the medical, but justice requires that some limits should be placed to the performance of such good offices. Poverty, professional brotherhood, and certain public duties referred to in section 1 of this chapter, should always be recognized as presenting valid claims for gratuitous services; but

neither institutions endowed by the public or by rich individuals, societies for mutual benefit, for the insurance of lives or for analogous purposes, nor any profession or occupation, can be admitted to possess such privilege. Nor can it be justly expected of physicians to furnish certificates of inability to serve on juries, to perform militia duty, or to testify to the state of health of persons wishing to insure their lives, obtain pensions, or the like, without a pecuniary acknowledgment. But to individuals in indigent circumstances, such professional services should always be cheerfully and freely accorded.

§ 4. It is the duty of physicians, who are frequent witnesses of the enormities committed by quackery, and the injury to health and even destruction of life caused by the use of quack medicines, to enlighten the public on these subjects, to expose the injuries sustained by the unwary from the devices and pretensions of artful empirics and imposters. Physicians ought to use all the influence which they may possess, as professors in Colleges of Pharmacy, and by exercising their option in regard to the shops to which their prescriptions shall be sent, to discourage druggists and apothecaries from vending quack or secret medicines, or from being in any way engaged in their manufacture and sale.

#### ART. II.—*Obligations of the public to physicians.*

§ 1. The benefits accruing to the public directly and indirectly from the active and unwearied beneficence of the profession, are so numerous and important, that physicians are justly entitled to the utmost consideration and respect from the community. The public ought likewise to entertain a just appreciation of medical qualifications;—to make a proper discrimination between true science and the assumptions of ignorance and empiricism,—to afford every encouragement and facility for the acquisition of medical education,—and no longer to allow the statute books to exhibit the anomaly of exacting knowledge from physicians, under liability to heavy penalties, and of making them obnoxious to punishment for resorting to the only means of obtaining it.

NOTE.—The committee on presenting this code, stated that justice required some explanatory remarks should accompany it. The members of the Convention, would not fail to recognize in parts of it, expressions with which they were familiar. On examining a great number of codes of ethics adopted by different societies in the United States, it was found that they were all based on that by Dr. Percival, and that the phrases of this writer were preserved, to a considerable extent, in all of them. Believing that language which had been so often examined and adopted, must possess the greatest of merits for such a document as the present, clearness and precision, and having no ambition for the honours of authorship, the Committee which prepared this code have followed a similar course, and have carefully preserved the words of Percival wherever they convey the precepts it is wished to inculcate. A few of the sections are in the words of the late Dr. Rush, and one or two sentences are from other writers. But in all cases, wherever it was thought that the language could be made more explicit by changing a word, or even a part of a sentence, this has been unhesitatingly done; and thus there are but few sections which have not undergone some modification; while, for the language of many, and for the arrangement of the whole, the Committee must be held exclusively responsible.



---

*On the Employment of Ether by Inhalation in Obstetric Practice ; with Cases and Observations.* By PROTHEROE SMITH, M. D., Member of the Royal College of Physicians ; Assistant Teacher of Midwifery at St. Bartholomew's Hospital.—(Lancet.)

The power of the vapour of ether, when inhaled, to diminish, or even to destroy sensation, and consequently pain, has been placed beyond doubt by the results of hundreds of surgical operations. Its safety in surgical cases may also be considered as established, especially when the administration of the ether is conducted with attention to the precautions indicated by experience. We may, I think, fairly consider that the instances in which ether will be administered before surgical operations, will be the rule—those in which it will be omitted, the exceptions. We may also, expect its use to be general in dislocations, hernia, spasmodic strictures, &c. In the first two of these cases, it acts in a twofold manner:—1st, it relieves the pain ; and 2ndly, it relaxes the muscles, whose contraction opposes reduction. We shall see that in midwifery, also it possesses the latter advantage, by its action upon the perinæal muscles.

Ether has been but little employed in painful medical cases ; and yet it has already been proved to give instant ease from the agony of neuralgia, and from the horrible dyspnœa of spasmodic asthma. A case of colica pictonum, which had resisted the usual means for three days, was cured by ether. A case of puerperal mania was immediately and permanently relieved ; and several cases of dysmenorrhœa have been recorded, in which this agent has acted like magic. Probably, many spasmodic diseases will be benefitted by inhalation of ether ; and we may confidently expect many forms of intractable hysterical pains to yield to it. In a few cases published by M. Piorry, which appeared unfavorably affected by it, the ether was probably impure. It is not my intention, however, to discuss the effects of ether in medical and surgical practice.

But though the diseases, as hysteria and dysmenorrhœa, which are commonly regarded as belonging peculiarly to the obstetric practitioner, will probably derive very great benefit from the ethereal treatment, I would proceed to the inquiry, whether its exhibition will ever be habitually employed in daily obstetric practice.

To answer this question, we may examine—1st, the *â priori* physiological probabilities ; and 2ndly, the results of the cases in which ether has been tried.

Labour is a complex process, in which every part of the nervous system is concerned. Now ether affects, in succession, every portion of the nervous system, unless we except the ganglionic.

In labour, the brain is in action, as is proved by the presence of thought and special sensation ; so, also, the pons Varolii (or whatever the seat of pain may be) is also active—as are the cerebellum, the medulla spinalis, the medulla oblongata, and the ganglionic system. But though all these portions of the nervous system are concerned

in ordinary labour, they are not all necessarily, or, as it appears to me, advantageously so.

It is proved beyond a doubt, by cases of paraplegia, that the patient may be sensible, and yet feel no pain, though the uterus contract regularly. The same absence of pain is seen in puerperal convulsions, in which unconsciousness is superadded: and in some cases of paraplegia, even the reflex actions of the abdominal muscles have been wanting, so that labour has been terminated by the efforts of the uterus alone. Cases have occurred in which the patient has been unconsciously delivered, without accident or apparent delay, when in a state of extreme intoxication.

Thus, then, of the usual nervous concomitants of labour, consciousness, pain, and spinal reflex action, may be wanting, and yet parturition proceed uninterruptedly.

But though they may be absent, can they be artificially abolished without danger? Can this be accomplished by ether—and if so, is it justifiable on Christian principles? as I have frequently been asked.

I will answer the last question before entering upon the consideration of the others; because, if we have reason to believe that an attempt to relieve the pains of labour would be in opposition to the will of God, all discussion of the other questions must at once be abandoned.

I think it is obvious that the same principle which would lead us to view any attempt to remove the dreadful and dreaded pains of labour, as opposed to the Divine will, would induce us to neglect every means of relieving human suffering. Though from different motives we should, like the Turks, passively bear evils easily removable, as disease and suffering are alike dependent on the event which elicited the decree—"In sorrow thou shalt bring forth." In fact, precisely the same objections have successively been made to most of the great discoveries and improvements in medicine. Some may remember that one of the great arguments against vaccination—and in the last century, against inoculation—was, that the practice was a presumptuous contravention of the Divine will. With far more reason might the objection be urged to the practice of inducing premature labour, and still more strongly against that of destroying in utero a living fœtus. And yet it is now universally admitted, that to risk the life of the mother by refraining from these operations is not only unjustifiable, but highly criminal. Certainly, then, if it is justifiable to attempt the relief of pain, it is especially imperative upon us to do so in the most intense of all pain.

I am induced to offer these observations in the hope that they may satisfy the scruples of those who have opposed the employment of ether in ordinary cases of labour, from a feeling that its use is not justifiable on Christian principles. Time has often hallowed what science and advancing knowledge have proved to be but the offspring of habit and prejudice; and in support of this assertion, I would quote a recent publication of Dr. Simpson, in which he says, "The

idea of its inevitable necessity makes both the profession and our patients look upon the amount and intensity of pain encountered in common cases of natural labour as far less worthy of consideration than they in reality are."

These observations, will, I trust, be deemed conclusive on this part of my subject. Pathology then, has proved that parturition will proceed without material interruption or injury by the ganglionic nervous influence. I do not enter into the question, whether the uterus is exclusively under the control of the ganglionic system. It is sufficient that it is very largely so.

Ether will first derange, and then temporarily suspend, in succession, consciousness, special sensation, common sensation, pain, (which is certainly something different from common sensation—i. e., tact,) power of muscular combinations, spinal reflex actions, and respiration.\* It is doubtful whether it will not, in some cases at least increase ganglionic nervous power.† It is certain however, that if the medulla oblongata is completely etherized, and, consequently, the movements of respiration stopped, the action of the heart is speedily arrested also, and life becomes extinct.‡

The chief authorities for enabling us to decide the question of the safety of ether from the actual results of its exhibitions are, Professor Simpson, and Baron Dubois; and both maintain that they have observed no bad effect on either the mother or child. M. Dubois distinctly "states that none of the women who inhaled ether experienced any bad effects attributable to ether."§ These gentlemen differ, however, in reference to the probability that ether will become universally, or even generally applicable to ordinary midwifery practice. The Baron states his "profound conviction that ether will be applicable to but a limited number of peculiar cases;" whilst the Professor entertains much more sanguine views. As yet, general experience favours the opinion of the latter.

The pain of labour (incomparably the greatest which human nature is called upon to bear) must, I think, be viewed as an unmixed evil. I will not quote the descriptions given by eminent accoucheurs of the agony and anguish of the final throes; they are universally acknowledged, as are also the bad effects of intense pain. Pain acts injuriously in several modes. Thus, its severity is very greatly dreaded, and the depression caused by the anticipation of its inevitable occurrence, preying for months upon the spirits, has been known to produce very injurious effects.

The hope that ether will substitute tranquil dreams for the dreaded suffering would obviate this evil. Again: pain is one of the greatest elements in the shock of labour. It is probable that all parts of the nervous system share in this shock. Now, if the effects of ether can be so regulated as to be confined to the brain and spinal marrow,

\* British and Foreign Medical Review, April, 1847. p. 571.

† Ibid, p. 572. M. Longet.

‡ Ibid, p. 572. M. Flourens.

§ THE LANCET, for May, 1847.



there would be left only those portions of the shock which are seated in the medulla oblongata and ganglionic system. I think we should not be justified in refusing the abolition of part, because we cannot destroy the whole of any evil. Again: do we not know the exact proportion in which the various parts of the nervous system share the shock; we only know that pain is a large element of it.

To the question, how far should we carry our etherization, I would answer, in ordinary cases of labour, merely till the cerebrum and pons Variolii are under its influence, as shown by the suspension of intellect, and of the perception of pain;\* but in cases requiring extraordinary manipulation or operations, we ought to bring the cerebellum and medulla spinalis into temporary narcotism, to prevent as far as possible, the violent muscular movements which, when the control of the will is suspended, might be productive of mischief. Consciousness is certainly no advantage to the obstetrician; for the patient can do little or nothing to assist him, and frequently may do much harm by her involuntary efforts to bear down, and by her restlessness, which latter often greatly debilitates and exhausts her.

It is obvious, assuming the power of ether to produce these effects, that unless we can regulate the dose, or other circumstances which modify its effects, so as to limit the action to the cerebrum, pons Variolii, cerebellum, and medulla spinalis, ether would be a dangerous agent. Fortunately there is no reason to doubt that, with proper apparatus, and common observation of the symptoms induced, we may invariably prevent the medulla oblongata from being involved.

Though causing the patient to breathe atmospheric air, ether pure, or mixed with the ethereal vapour, has hitherto been sufficient to check any approach to stertor or coma, and also to relieve such conditions when induced, I have observed, with much pleasure, that Mr. Hooper has adapted to his inhaling apparatus an appendage for administering oxygen. This will be a most valuable adjunct in cases where there exists an unusual degree of susceptibility to the effect of ether on the medulla oblongata.

Complete insensibility to pain exists only when the pons Variolii or seat of pain is narcotized; and M. Longet states (in a paper quoted in the last number of the *British Foreign and Medical Review*) that no operation should be attempted until this effect is produced.

On the patient awaking from the state of etherization, the nervous functions return in the same order that they were suspended. This explains the fact of many patients being perfectly sensible, and holding rational conversations, but being the whole of the time unconscious of pain.

The following observations by Dr. Simpson will serve to explain my reasons for venturing to enrol myself amongst the advocates of the new remedial agent:—

He says,—“A careful collection of cautious and accurate observations will no doubt be required before the inhalation of sulphuric ether

\* *British and Foreign Medical Review*, April, 1847, p. 571.

is adopted to any great extent in the practice of midwifery. It will be necessary to ascertain its precise effects both upon the action of the uterus and the assistant abdominal muscles; its influence, if any, upon the child; whether it gives a tendency to hemorrhage or other complications; the contra-indications peculiar to its use; the most certain modes of exhibiting it; the length of time it may be employed, &c."

In the hope that some of these desiderata may be supplied, I now beg to lay before the profession the following interesting cases of instrumental labour which have occurred in my practice within the last few days, and in which I have employed ether by inhalation:—

**CASE 1.**—On the afternoon of Sunday, 28th ult., I was summoned by Mr. Alder Fisher, to a lady on whom he had been in attendance all day. The expediency of being prepared to employ ether by inhalation, should it be deemed advisable, having been suggested, I gladly availed myself, as on previous occasions, of the valuable services of Mr. Tracy, of St. Bartholomew's Hospital, who has not only invented an ingenious and simple apparatus for administering this agent, but has successfully applied it in several hundreds of surgical cases. On our arrival at the residence of the patient (about four P. M.), we found her in strong labour with her first child. We were informed that her age was forty, and that she had been married eleven months. She is a woman of spare habit and lax fibre: apparently well formed and about five feet three inches in height. From the age of fourteen, at which the catamenia first appeared, she has always been "regular;" and although not of a robust frame, has enjoyed uninterrupted good health; her last menstruation was in the end of June. I learned from Mr. Fisher, that premonitory labour pains had commenced at half-past twelve A. M., and had gradually increased, both in severity and frequency, until three A. M., when they recurred regularly every twenty minutes. At five A. M., the intervals became shorter, the uterine contractions coming on every ten or fifteen minutes, and the suffering they occasioned, even at this early period of labour, was very considerable. When first seen by Mr. Fisher, at eight A. M., although the os uteri was only dilated to the extent of half-a-crown, the head, still in the uterus, rested on the perinæum. At four P. M., the pains which had been frequent and energetic since eight A. M., were now both strong and expulsive, recurring every four or five minutes, and the patient complained greatly of her sufferings. Having been informed of the benefit resulting from the employment of ether by inhalation, she was very urgent for its immediate adoption. The bowels had been well acted upon during the day; the tongue was moist and clean; and she was perspiring profusely. On a vaginal examination, the passage was found to be cool and well lubricated; the os uteri dilated to the size of the rim of a tea-cup; and the child presenting in the first cranial position. The head rested on the floor of the pelvis, and forcibly pressed, during each pain, against

the covering tuberosities of the ischia, the distance between which was barely four inches. The membranes were entire and distended with liquor amnii; they protruded through the opening os, the margins of which were rapidly yielding; the uterine structure was soft and dilatable. Being satisfied that there existed no abnormal applications to forbid the inhalation of ether, its exhibition was commenced by Mr. Tracy, at a quarter-past four p. m., immediately after the spontaneous rupture of the membranes. At this time a pain was coming on, which proved to be very violent, and was attended with considerable straining, and some retching. The ether in three minutes, produced insensibility to suffering, although the pains continued as strong as previously to its application, and recurred regularly every three minutes. The patient occasionally gave rational answers to questions, and stated that she had scarcely been conscious of any pain since the administration of the ethereal vapour; her friends who were present could hardly credit her report, as no difference in the violence of their efforts, or in the character and severity of the uterine contractions could be remarked.

The following notes of the farther progress of the case were taken on the spot:—At half-past four p. m., the uterine contractions have recurred at intervals of three minutes only, though the patient has remained perfectly narcotized for the last quarter of an hour. During these pains, which were very powerful, the legs were at times forcibly extended, and the right arm raised, and all the usual straining exclamations during expiration, continued as before. On placing my hands upon the abdomen, I became sensible of the powerful contraction, not only of the uterus, but also of the abdominal muscles. The os was now fully dilated.—Forty-three minutes past four p. m.: Since the escape of the waters, she has had pains every two or three minutes, and her cries are loud, sharp, and expressive of severe expulsive efforts. In the intervals of pain, the child's head rests on the perinæum, (producing a distension of its right side, and of the corresponding labium pudendi,) and is closely embraced by the bony outlet. The pains are of short duration. Pulse 84, soft and compressible; skin freely perspiring. Fifty-three minutes past four p. m.: During the last fifteen minutes, the inhalation has been discontinued, and there has been an intermission of uterine contractions for four minutes. In reply to inquiries, she again says she has felt scarcely any thing since the ether has been employed.—Thirteen minutes past five p. m.: For the last twenty minutes the ether has been administered only during uterine action, the intervals between which have been only two or three minutes. She occasionally cries out as if in slight pain, but when interrogated, states she is "perfectly easy and comfortable."—Fifty minutes past five p. m.: The pains have continued every three minutes, but have produced no apparent effect on the head, which is firmly fixed at the outlet; the amount of straining effort, the peculiar cry, and the expression of the face, seem to betoken great suffering during her pains, but she again asserts that she



is "easy." The ether was now again suspended for ten minutes, when she had three uterine contractions, and became sensible to pain.—Half-past six P. M. : Under the influence of the ether, in the last half hour she has had twelve pains, and has been wholly unconscious of them. The head is still fixed at the outlet. Forty-five minutes past six P. M. : During the last ten minutes the ether has not been employed, and the pains have been precisely of the same character as when she was inhaling; she also states that they are productive of much agony. As the head had made no advance, and had been firmly impacted for half an hour, the cranial bones overlapping considerably, I determined after ascertaining by the stethoscope that the child was alive to apply the short forceps. This was accomplished at seven P. M., after emptying the bladder, and again narcotizing the patient. It was evident, from the extent to which the handles of the forceps were separated, that the head was a very large one, and that it would require considerable compression, as well as traction, to bring it through the disproportioned outlet. To accomplish this with safety to the mother, and with a prospect of saving the life of the child, I made my efforts at intervals of two or three minutes, during which I relaxed my grasp of the head, and held the handles of the forceps loosely, in order that the brain might recover from the effects of the severe pressure to which it was subjected during traction. By these means the head was delivered in fifty-five minutes from the first application of the instrument, and at fifty-five minutes past seven P. M., a living male child was born. After the introduction of the forceps, some difficulty was experienced in consequence of the forcible extension of the patient's legs, and the constant disposition to straighten the body during the strong expulsive efforts. With the assistance of Mr. Fisher and another gentleman the pelvis was held in a favorable position; the right leg was separated from the other, and fixed on the abdomen, so as to admit the handles of the instrument between the thighs. By these means, and by occupying a position in front of the patient, I could easily employ traction in the direction of the outlet with my right hand, whilst with the left I supported the perinæum. The placenta quickly followed, and at eight P. M., the uterus was felt, firmly contracted, through the abdominal walls; a bandage was immediately applied round the abdomen and pelvis, and the ether, which, during the whole period of the operation had effected complete narcotism, was discontinued.—Five minutes past eight P. M. : Consciousness is restored; she expresses a hope that she shall soon be delivered, adding that she is very comfortable. She says she feels as if just awoke from a painful dream. When informed of the termination of her labour she burst into an hysterical laugh, and exclaimed, "It is a dream! It must be a dream! Oh what a good thing it is that I had the ether!" She also observed she had not been sensible of the circumstances attending her delivery.—Quarter past eight P. M. : Appears somewhat exhausted, and her face being still flushed, it is ordered to be bathed

in cold water. From this period she became rapidly restored to her usual state of mind and sensibility. Farinaceous nourishment and perfect quiet are enjoined.

The child weighed eight pounds and a half; it is twenty-two inches and a half in length. The dimensions of the head are as follows:—round the head and face, in the direction of the oblique or occipito-mental diameter, sixteen inches; around the forehead and occiput, in the longitudinal or fronto-occipital diameter, fifteen inches: from one parietal protuberance to the other, across the vertex, six inches.

It is worthy of observation, that neither the character nor the frequency of the pains was affected by the use of the ether; that all the efforts of the abdominal and other muscles which aid in expulsion, and also the characteristic cries, continued unaltered; that though consciousness remained, excepting during the last hour, in which the forceps were employed, she was wholly insensible to pain, except when the ether was suspended for a time; that with the exception of this rest, she continued under its influence for three hours and three quarters, without experiencing the least injurious result; and that she inhaled, in all, eight ounces and a half of pure ether.

Notwithstanding the advanced age of the patient, and the disproportion between her pelvis and the child's head, delivery was effected within twenty-hours from the time premonitory labour pains commenced, and with perfect safety to both mother and child.

In referring to the rigid condition of the extreme muscles of the trunk and inferior extremities, I would direct attention to the position of the operator and the patient, as well calculated to overcome the difficulties created by these circumstances in instrumental labour. The result of this case also shews the importance of observing attentively the space between the blades of the forceps during compression, as with little practice it will enable the accoucheur to determine with accuracy the diameter of the child's head, and its relative proportion to the passages of the mother; and thus he will be better able to decide the important question of delivery by means of the forceps or perforator. From a conviction that the life of a child may sometimes be sacrificed by forcibly tying the handles of the forceps together, and by thus keeping up uninterrupted pressure on the head during the operation, I now usually adopt the plan mentioned in this case, by which the head is free from compression, save only during the efforts of traction.

It is to Professor Naegele, of Heidelberg, that we are indebted for having first pointed out the true mechanism of parturition, and for showing that the head of the child passes through and emerges from the pelvis obliquely. Dr. Rigby observes, in his "*System of Midwifery*," that in the first cranial position, the right parietal protuberance lies, in the early stage of labour, lowest and deepest in the pelvis; whilst the superior and posterior quarter of this bone is the part which first comes under the public arch and enters the external passages. I am not, however, aware that any one has observed a

fact of some practical interest, in reference to this subject, which I have long known, and which I have alluded to in the above notes—viz., that in the first cranial position the right side of the perinæum and corresponding labium pudendi are chiefly subjected to pressure during the distention of the soft parts, and therefore principally demand the support which may be necessary to save the perinæum from the accident, and *vice versa* when the head passes in the second position. From my own observations, I am induced to believe that future experience will prove, that as the first cranial position is the most common, so rupture of the perinæum usually occurs on the right side of its raphé, and that this accident may most effectually be prevented by acting on the suggestions I have here ventured to make.

March 29th.—Eleven A. M. : Has passed a comfortable and tranquil night, and has slept without dreaming—a very uncommon occurrence with her; the lochia are natural in quantity, &c.; pulse 70, soft and regular; tongue clean; is very cheerful, and entirely free from ailment, with the exception of inability to evacuate the bladder; a pint of healthy urine was accordingly drawn off by the catheter. She observed this morning that she had a most vivid recollection of severe suffering previously to the inhalation of the ether, and also a slight impression of having felt some pain during the intervals of its exhibition, which entirely ceased after a few inspirations; that with these exceptions, she was not at all aware of the birth of the child, or of any circumstance attending her confinement; and that it was not until after her face and temples had been bathed with cold water that perfect consciousness was restored, when she felt as though she had awakened from some strange and painful dream, the subject of which she could not call to memory.—Eleven P. M. : Has passed her urine spontaneously; is doing well in every respect. The child is healthy, and takes the breast readily.

30th—Noon : Has had a good night; the milk is increasing; and with the exception of feeling rather stiff, she is perfectly well.

April 19th.—Both mother and child continue perfectly well, and since the delivery no medical aid, beyond the passage of the catheter on one occasion, has been required.

CASE 2.—April 1st, 1847. Mrs. —, aged thirty-three; married ten years and a half; has had six children, of which the last was born in February, 1846; is a robust looking woman, with florid complexion; states that her general health is good, and that, with the exception of slight chronic cough, she has been free from ailments during the term of utero-gestation; says her family is of a consumptive and rheumatic tendency, her mother having died at forty, and a brother at twenty, of phthisis; has always been “regular” from the age of sixteen, except when pregnant or nursing. Her first five labours were ordinary in their character; the fifth lasted forty-eight hours, and was attended with great suffering; and the sixth and last, five hours: in each the child was a female. In the last, the head was arrested at the brim for some time, and in consequence my assistance



was called for; but as the labour terminated before my arrival, I did not make any examination. She last menstruated at the end of June. The bowels have been freely opened, and the bladder has been lately relieved. Premonitory symptoms of labour commenced on Sunday, 28th ult., recurring about every two hours. On the following day, 29th, they abated in frequency and power; but became more urgent on Tuesday, 30th, towards evening, with intervals of only half an hour. The pains were felt chiefly in the groin and hypogastrium. On Wednesday morning, 31st ult., she had an interval of rest until about eight o'clock, when a strong pain ruptured the membranes, and what she described as a "good deal of water" escaped. From this time the pains recurred about every half hour, until six A. M. of the following day, when they became slack. Mr. Orford, who attended this patient, first visited at eight P. M. of the 31st ult. The os uteri was then soft and dilatable, but not at all dilated. An enema was given, which emptied the rectum. He visited her again at half past twelve o'clock, when the dilatation of the os uteri was nearly complete. The pains having been very powerful and frequent, without any effect on the head of the child, Mr. Oxford gave tincture of opium, half a drachm, at five A. M. During the early period of labour, he could not detect the true position of the head in consequence of its high situation in the pelvis. Mr. Campion, who was called to the patient, first saw her at 6 A. M., when the head was resting on the pelvic brim, and was moveable; and as the symptoms at that time were those of arrest, he administered three doses of ergot at half-past six, seven, and half-past seven A. M. successively. This treatment had the effect of increasing the strength and frequency of the pains; but without producing any advance of the head, which became firmly fixed in the brim.

The above history was given to me on my arrival at ten A. M. On making a vaginal examination, I found the passages cool and well lubricated; the head resting on the brim, and firmly fixed during a pain; slightly moveable in the intervals. A very large *caput succedaneum*, and an evident malformation of the pelvis, rendering it difficult to diagnosis the true position of the child. On carefully examining, however, I ascertained that it occupied the first cranial position, the posterior fontanelle being turned in the direction of the left foramen ovale.

The pelvis, in this case, formed a remarkable example of that condition so faithfully described by Professor Neagele, of Heidelberg, under the appellation of "*pelvis oblique ovato*." In this instance the pelvis was twisted, so that the symphysis was inclined to the right, and the sacrum to the left. The left side of the pelvis was flattened, as though driven inward, and the left linea ilio-pectinea presented almost a straight line from the sacro-iliac synchondrosis to the posterior margin of the foramen ovale. From this point, the body of the pubic bone abruptly inclined backwards, so as to present a distinct ridge of the size of a finger. This ridge was formed by the angle,

perpendicular surface, and inner margin of the ramus, and projected backwards so as to contract the conjugate diameter of the brim. This projection at first conveyed to the touch the impression that it was a considerable exostosis; but on further investigation, the true nature of the malformation was detected. Anteriorly, I could feel a narrow rim of the uterus, (the remains of the anterior lip,) and by introducing two fingers this rim could be traced backwards, encircling the head of the child, and pressed between the projection of bone and the brim of the pelvis. The pains were coming on every three or four minutes; but were not at all powerful, lasting from a quarter to three quarters of a minute. It having been ascertained by the stethoscope that the child was alive, I determined to administer ether by inhalation. The patient was very urgent to be relieved from her sufferings, which were beginning to tell upon her strength and nervous system. At a quarter to eleven A. M., the ether was accordingly administered by Messrs. Campion and Oxford. At first it induced slight cough, which entirely disappeared in about five minutes. At the end of the first eight minutes during which she continued to inhale, but not uninterruptedly, she became conscious of a pain—the ether having been very imperfectly taken, from her frequent efforts to talk and to interrupt the process of inhalation. In ten minutes she was quite reconciled to its use; but owing to its imperfect exhibition, she became rather inebriated than narcotized. In this state she continued until a quarter to twelve, uterine contractions recurring every three or four minutes, but unattended by any efforts on the part of the abdominal muscles. From this time the ether produced more effect, and she became unconscious of her pains, though they were much increased in power, and were aided by distinct action of the assistant abdominal muscles. These were felt to contract forcibly under the hand. She was at times very loquacious. At every vaginal examination the “pains” became more frequent, returning every minute, and were much increased in intensity.—fifty-five minutes past eleven: Is completely narcotized; the hand drops powerless when lifted up; the eye is turned up under the superior lid; her face is flushed; pulse 92, soft and smaller; skin profusely perspiring. The narrow rim of the cervix uteri can no longer be felt; the head is firmly impacted in the upper strait; the bones of the cranium overlapping.

Having determined on employing the long forceps, from the impression that, notwithstanding the great deformity, there was room to bring the head through the contracted brim by cautious traction, having previously introduced the catheter, I accordingly applied this instrument at a quarter to twelve. For about half an hour, my repeated, but interrupted, efforts to extract were apparently unavailing; but in a few minutes afterwards, the head slipped suddenly over the projection before described, and fairly occupied the true pelvis. During this process, I passed two fingers of my left hand—one on each side of the projection, so as to guard it effectually from undue pres-

sure during traction. A few more efforts brought the head through the os externum, when the child cried loudly. The body quickly followed, and the placenta was thrown off by the same pain that expelled the child. The uterus contracted well, and there was very little hæmorrhage. The ether, which had been employed with but little interruption for two hours, was discontinued immediately after the birth of the child; and the patient recovered her consciousness in two or three minutes. Though apparently aware of the presence of pain in the early part of the process, she expressed herself very grateful for the use of the ether, and stated that she was entirely ignorant of the birth of the child, and of the means which had been adopted for its accomplishment. The pains instantly ceased on the expulsion of the secundines, but were immediately induced on the introduction of my finger, after the completion of the labour, in order to ascertain with more accuracy the true state of the pelvic deformity. So powerful were the expulsive efforts thus induced, that the uterus was forcibly driven down to the outlet; but these after-pains suddenly ceased with the withdrawal of the finger, and a state of perfect repose followed. The child is a very large and vigorous boy; the head presented a perfect cast of the deformed pelvis of the mother; it is very oblong—perfectly flattened on its left side from the lambdoidal suture to the temporal ridge of the frontal bone; whilst the opposite side describes a hemispherical, or rather semi-oval, figure, elongated by a very large *caput succedaneum*, which occupies the superior posterior angle of the right parietal bone.

April 2nd.—Has passed a tranquil night. Both child and mother are in every respect well. She states that she has no recollection of any circumstance from the time the ether was first administered, until the escape of the placenta from the vagina, of which she was conscious, though she felt no pain. She is most profuse in her grateful acknowledgements of the blessing of the ether, which she hopes will be employed again, should she become pregnant.

6th.—Is sitting up in bed, and observes that she has suffered less after this confinement than in any previous one—in fact, that she has experienced no exhaustion, and, to use her own expression, “never felt so well in her life.” The unusually healthy condition she attributes to the use of the ether. Her cough is almost gone, and everything is going on favourably. The child is vigorous, and takes the breast eagerly; and its head has recovered from the misshapen state in which it was born.

CASE 3.—Mrs. H——, aged twenty-four; primipara; of delicate appearance, and weakly constitution. From the age of fifteen years and a half, when menstruation first occurred, her health suffered from the sedentary nature of her occupation—that of dress-making. But from the period of her marriage, twelve months since, she has relinquished her business; and has enjoyed better health, though she has occasionally experienced pain in her chest, and has had at times black mucous expectoration. Her last menstruation was in July,



1846. Labour commenced at ten p. m. on the 14th of April. She was first visited by Mr. Oxford, at seven a. m., on the 15th, when the os was dilated to the size of a crown piece; and the pains were slight, and recurred at long intervals. The bowels having been constipated for some days, an enema was administered. At ten a. m., the uterine efforts were powerful and frequent, and the os fully dilated. The child was presenting in the first cranial position. The membranes ruptured during a pain at noon, at which time the head had not entered the true pelvis. The uterine contractions then became very forcible, and the intervals short, until two p. m., when the head descended to the outlet, where it remained stationary. At half-past three p. m., Mr. Oxford gave her half a drachm of the ergot, the uterus having been in a state of inertia for an hour and a half. From this time until eight p. m., notwithstanding very frequent and expulsive efforts, the head made no advance. Mr. Campion having seen the case at this juncture, concurred with Mr. Oxford in the necessity for instrumental assistance, and my attendance was accordingly requested. On my arrival, I found the patient much exhausted, and very desirous to be relieved of her pain by the agency of ether. For nearly four hours the head had been firmly impacted at the outlet, the transverse diameter of which did not exceed three inches and a half. The cranial bones were overlapping to a considerable extent, and the caput secernaneum was very large. Having satisfied myself of the healthy condition of the thoracic viscera, and that the child was alive, the use of the short forceps and the inhalation of ether appeared to me to be clearly indicated. After the bladder had been emptied, the ether was administered by Messrs. Campion and Oxford at ten minutes to nine p. m. In three minutes, she became perfectly narcotized, when I introduced the forceps and extracted the head in twelve minutes afterwards. The body of the child followed in five minutes more, and the placenta was expelled by natural efforts in about ten minutes afterwards.

When I first visited this patient, I found that her pains were recurring every two or three minutes; but when she became under the influence of ether, their force and frequency were evidently augmented; the abdominal muscles, as well as the uterus, contracted powerfully, and each effort was attended by the cries peculiar to the last stage of labour. During the period of etherization, the breathing at first was stertorous for a few moments, and the thighs and legs were forcibly flexed, and drawn towards the abdomen. Having adopted the mode of operation proposed in Case 1, the extraction was accomplished with great ease. The head of the child (a male) was much flattened by the action of the forceps, and was still-born, but the usual means for restoring animation were successful before the separation of the funis. The maternal surface of the placenta, which was very large, presented a beautiful net-work of white, thread-like lines, apparently calcareous; this diseased condition of the placental cotyledons appeared to have exerted no injurious influence on

the child, or to have impeded the separation of the after-birth. I much regret that, owing to some misunderstanding, the placenta was destroyed. It is worthy of remark, that the perinæum presented no obstacle to the passage of the head, being perfectly relaxed, and yielding readily to its pressure. In both this and the first case, the usual rigidity of the soft parts was entirely wanting, and I think we may venture to attribute this condition to the influence of the ether. Indeed, in both instances, and more particularly in Case 1, where the patient was a primipara, and forty years of age, this favorable condition was sensibly effected in the narcotized state. The uterus contracted firmly after the completion of parturition, and the loss of blood was trivial.

On restoration to consciousness, which was expedited by bathing the face with vinegar and water, she observed that she had been asleep, but yet was strangely impressed with the conviction that she had been "travelling very far on a railroad;" she was totally ignorant of all which had occurred during her state of narcotism. She expressed the hope that her labour would soon be terminated, and when I intimated to her that it was already accomplished, she replied, "Oh I won't believe that!" nor could she be convinced of the fact, until her infant, a fine, squalling boy, was called upon to witness to its truth.

Eleven p. m. : Is quiet and comfortable ; says she only feels weak ; lochia and urine have been passed freely ; the child has taken the breast ; she has asked for something to eat ; she has had some after-pains.

April 16th.—Both mother and child are well ; the former has passed a tranquil night. Towards evening the after-pains became troublesome, but disappeared after the expulsion of a few coagula.

17th.—The mother and child are going on well in all respects.

During traction on the head, which was in the first position, the bulging of the right side of the perinæum and labium pudendi, as mentioned in Case 1, was very evident to Mr. Campion, whose office it was to support the soft parts. In this case, it is remarkable that the legs were flexed, as extension of the lower extremities has been usually observed under the influence of ether.

The result of the foregoing cases will, I think, bear out Mr. Du-  
bois's summary—viz :

1. Ether prevents pain during obstetric operations.
2. It may momentarily suspend the natural contractions, but
3. It does not suspend them, nor the contraction of the abdominal muscles, when energetically set up.
4. It appears to lessen the natural resistance of the perinæal muscles.
5. It does not appear to exert any bad influence on the life or health of the child.
6. It does not prevent or retard the subsequent contraction of the uterus.

To these conclusions, I would add—

1. That ether produces freedom from pain during natural labours, as well as during obstetric operations.

2. That it is very probable that the momentary suspension of uterine action, which sometimes occurs when ether has been administered in the earlier stages of labour, may be caused by the novelty, not unmixed with fear, of the inhalation, just as the arrival of the accoucheur will often temporarily suspend the contractions.\*

3. That it will be a most powerful agent in preventing rupture of the perinæum, especially in primiparæ advanced in life; firstly, by producing relaxation of the perinæal muscles; and secondly, by rendering the woman incapable of sudden movements, during the support of the soft parts, under the intolerable pain when the head is emerging from the os externum.

4. There is no evidence to show that the ether has any bad influence on the mother. If it has, the proof remains to be adduced.

Thus, then, I agree with Professor Simpson† in anticipating great advantages from the use of ether, not only in cases requiring manipulations or operations, but also in natural cases; and the chief advantages which I think we are entitled to expect are—

1. The saving of suffering—perhaps the greatest borne by human beings, and in no way contributing to the happy termination of the case. Possibly as a drawback from this advantage, we may admit that an experienced practitioner may occasionally pinch or bruise the maternal soft parts, from the inability of the patient to give any warning by her complaint.‡

2. The saving of a considerable portion of the shock, or that portion of it dependent upon the brain, which always occurs, and which can certainly not be looked upon in any light but that of an evil, and which is sufficient, in some cases, to destroy life.

3. The obtaining sleep, or at least quiet, during the progress of the case.

4. The more speedy relaxation of the os uteri and perinæal muscles.

5. During operations, the very great advantage of having the patient lying perfectly still.

6. The removal of the dread which many patients entertain during the whole of their pregnancy, and which, by its depressing effects, may prove injurious.

In all the cases published, the relief has been great and immediate. In none has there been any untoward event—no hemorrhage, no convulsions, no collapse, which could fairly be chargeable upon the

---

\* I observed this to occur in Mr. Skey's case of Cæsarian operation, at which I assisted, the fatal termination of which was the combined result of peritonitis and previous shock.

† Dr Simpson, who was the first to employ this agent in midwifery practice, has used it with perfect safety and success in forty or fifty cases, in some of which the etherization was kept up for hours.

‡ Let it be remembered, however, that two of Baron Dubois' cases, which terminated fatally from metro-peritonitis, were forceps cases; but puerperal fever was present in the wards of La Maternité.



ether. Baron Dubois distinctly says, that he could trace no bad effects in his five cases to the ether; and my own experience confirms this account. He bases his opinion, that ether will never be habitually employed in ordinary cases, upon two main grounds; 1st, the small number of cases which he had to refer to; and 2nd, the impossibility or probable danger of keeping a woman etherized for several hours. Both these grounds have been removed; the latter especially, by the result of Dr. Simpson's cases and my own; and it is very doubtful if the Baron would not at this time greatly modify his opinion.

A point which may become of great interest and importance is, whether other agents cannot be combined with the ether; for instance, laudanum where the pains are dangerously violent; or tincture of ergot where they are insufficient. In one of Dr. Simpson's cases, the patient inhaled a volatile solution of ergot. The pains, which had previously been languid, almost immediately became strongly expulsive, and the child was born in a quarter of an hour. The woman had been in labour from forty to fifty hours.

In conclusion, I would state it as my opinion, that with perfectly pure ether, carefully administered by skilful persons, and with good apparatus, and especially by one containing an appendage with a supply of oxygen, the operation not being commenced until efficient etherization is produced, the employment of ether is not only justifiable, but promises to be instrumental in materially diminishing the dangers of operative midwifery. Probably, in natural cases it will be both sufficient and safer to carry the etherization only to the second stage, in which partial consciousness remains, but sensation is abolished; and towards the end, when the pains are ordinarily intolerable, to induce perfect narcotism. From the results which I have already obtained, it is my intention to continue the use of this valuable agent, and I do not hesitate to state my belief, that future experience will fully confirm my present opinion.

John-street, Bedford-row, April, 1847.

---

### PART III.—MONTHLY PERISCOPE.

*Are the movements of the Heart dependent upon the Brain and Spinal Marrow?* By Dr. JULIUS BUDGE.—We translate from the *Gaz. Méd. de Paris*, the following condensation of an article inserted in the *Archiv. für Physiologische Heilkunde*, by Dr. Budge.

In the first chapter the author notices all the theories that have ever been advanced in relation to the movements of the heart. These movements have been attributed—

1st. To the fire and innate heat of the blood; to the dilatation of the blood by heat (Hippocrates, Descartes, Sylvius.)

2d. To the power of the parenchyma of the heart; to muscular irritability (Galen, partly by Senac, Haller, Winter, Passavant.)

3d. To the nervous influence (Borelli), and 1st to the influence of the cerebellum (Willis); 2d to the soul (Stahl and his school, Potterfields, R. Whytt, Sauvages); 3d to the medulla spinalis (Legallois); 4th to the medulla oblongata (Budge); 5th to the ganglia (Lancisi, Bichat, Reil, Brachet, Volkmann).

In the second part of his work, the celebrated physiologist gives a detailed description of the heart and of the cardiac nerves of the frog; in the third part he analyses the influences of the brain and spinal marrow upon the muscles of voluntary motion, the influence of air and blood upon the heart, and finally the influence exerted by the brain and spinal marrow upon the motions of the heart. Dr. Budge relates numerous experiments made upon frogs, and arrives at the end of his lengthy work to the following conclusions:

1st. The medulla oblongata is the central organ of the heart's action, inasmuch as it presides over the irritability of the voluntary muscles.

2d. The medulla oblongata is also the central organ of the reflex movements of the heart, but its influence is not very marked, because,

3d. The movements of the heart partake very slightly of any of the reflex actions of other parts of the body, and are principally mere movements of irritation.

4th. The ganglia of the sympathetic nerve are not the central organs of the heart's action, neither produce nor keep up its rhythm, but they seem to destroy the influence of volition and of reflex action.

5th. The brain of the frog evinces no direct influence upon the motions of the heart, but a marked indirect one.

---

*Effect of Various Substances injected into the Arteries.* Read before the Academy of Sciences (Paris) by M. FLOURENS. (Translated from the *Gaz. Med. de Paris*, June, 1847.)—I have already made known the effects of Ether injected into the arteries. Its effects when injected and when inhaled are opposite. When *inhaled*, it destroys sensibility before motion, whereas when *injected*, the destruction of motion precedes that of sensibility. In my former experiments I had employed only sulphuric Ether; but I have since obtained similar results with acetic Ether, oxalic ether, alcohol, sulphuric acid and ammonia. I have successively injected into the arteries of different dogs acetic ether, oxalic ether, rectified alcohol, diluted sulphuric acid, ammonia diluted with water, and in every instance motility has been impaired, frequently completely suspended, whilst sensibility was perfect. I will now relate one of the experiments: 3 decigrammes of ammonia in 4 grammes of water, were injected towards the heart into the crural artery of a dog. The motility of the posterior extremities was instantly paralyzed. The sciatic nerve was exposed and pinched, when the animal cried aloud, but without moving the limbs; there were only very slight contractions of the muscular fibrils.

The experiments made with the acetic and oxalic ethers, alcohol and sulph. acid furnished results similar to the above-mentioned, viz., sudden loss of motion in the posterior extremities and sometimes total annihilation of fibrillary contraction, with unimpaired sensibility.

The injection of a gramme and a half of spirits of Turpentine in the right crural artery of a dog, forced towards the heart, produced a different effect. There was loss of motion and retention of sensibility, but the paralyzed muscles instead of being relaxed and flaccid as in the other cases, were now in a state of violent tetanic rigidity. The injection of a gramme of nitric ether was followed by immediate death.

Having found substances which when injected into the arteries abolish motion but not sensibility, I sought for some that would destroy sensibility without affecting mobility. The powdered root of Belladonna produced fully the desired effect, although the extract of Bellad. seemed inert. 3 decigrammes of pulv. Bellad. root suspended in 18 grammes of water thrown towards the heart into the right crural artery of a dog, produced immediately complete paralysis of motion in the posterior extremities. Thus far the result is the same as in the other cases. It is necessary to mark the distinction between the general motion of the limb which is abolished in all and the contraction of the isolated muscular fibrils which persists in some of the experiments. In this case the nerve being exposed and pinched excites the fibrillary contractions, but is utterly insensible. It is pinched, lacerated, cut, and torn away without eliciting from the animal any indication of sensibility.

The powder of Hemlock, of Valerian, of pepper, of Spanish tobacco, &c., yielded results similar to that of Belladonna. The fact that the powder alone of Belladonna would produce the effects, led me to try other powders more or less inert. The powder of oak bark, of liquorice, &c., were tried with the same results as powdered Bellad., Hemlock, pepper, &c. M. F. concludes by observing that there are no experiments in physiology more astonishing; yet they are true.

---

*On the Cretinism of large cities, its cause and analogy with that of the Alps.* By Dr. BEHREND. (Translated.)—The study of authors and the daily observations of Dr. Behrend, of Berlin, have led him to admit:

1st. That there exists a cretinism of large, populous and crowded cities as well as a cretinism of the Alps.

2d. That the cretinism of cities exists in the contracted dwellings located in deep, narrow, and obscure lanes, as it does in the ravines and narrow valleys of the Alps.

3d. That the cretinism of cities differs very little from that of the Alps; its progress is perhaps more rapid, and it more frequently ends in marasmus.

4th. That its causes are a confined, cold, humid atmosphere, saturated with pernicious agents; the absence of solar light; insufficient



heat; nourishment of a bad quality, and not containing sufficient animal matter; solitude and deficient intellectual culture; uncleanness and privation of other comforts.

5th. All these circumstances pervert the act of hematosis, produce a scrofulous, rachitic, anemic, and chlorotic diathesis, and blunt the energies of life.

6th. Cretinism is therefore a scrofulous, rachitic diathesis, complicated with chlorosis and stupidity of the intellect and senses.—[*Gaz. Méd. de Paris*, from *Journal für Kinderkrankheiten*.

*Strychnine in Intermittent fever.* By DANIEL BRAINARD, M. D., Prof. of Surgery in the Rush Medical College. (Ind. and Ill. Med. and Surg. Journal.)—From the 20th of February to the 1st of April, the strychnine was prescribed in 83 cases of intermittent fever.

|   |   |   |   |          |
|---|---|---|---|----------|
| Of those it had no influence over,            | - | - | - | 14 cases |
| It arrested the paroxysms for one week, in    | - | - | - | 3 "      |
| For two weeks, in                             | - | - | - | 6 "      |
| It arrested it permanently, or to May 1st, in | - | - | - | 60 "     |

Of the above, two cases had taken quinine without the smallest effect, but were relieved by the strychnine. Nearly all, and probably every one, had taken quinine from time to time with only temporary relief. All were old cases in which there had been from two to twenty returns of the disease in twelve months. The mode of administration is as follows: One-eighth of a grain is given thrice a day, after meals, in the form of powder or pill, until one grain is taken. If the pills are used, they should be recently made and not allowed to become dry and hard. There is an advantage in giving it after meals, as it then becomes mixed with the contents of the stomach, and is less likely to produce unpleasant effects. In but three of these cases referred to were there any such effects—in these, symptoms of nausea and vertigo occurred.

From the facts here stated, we are justified in concluding that in a very large number of cases of ancient agues, attended with debility, and unaccompanied by local inflammation, the strychnia is very nearly equal to the quinine in arresting the paroxysms, and much superior to it in removing that state of debility and derangement of the secretions which we believe constitutes the first and persisting pathological state of the disease.

*Hydriodate of Potass in Hydrocephalus.*—Dr. Mead, in the Indiana and Illinois Med. and Surg. Journal, relates some cases of this disease, successfully treated with the hydriodate of potass. Calomel was also freely administered between the doses of the hydriodate. The most marked effects in all the cases were diuresis, dribbling of saliva, and generally the rapid disappearance of the convulsions and the insensibility. "The conditions of the Brain," says Dr. M., "in which I have mostly used this agent, are Hydrocephalus and Hyperemia. For the former, I consider it as much of a specific as any thing in medicine can be."

*A new method of Excising Bones, the periosteum being allowed to remain and the bone being reproduced.*—The “Gazette Médicale de Paris,” (3d June, 1847,) contains a notice of the very interesting discovery of “le chevalier Bernardin Larghi,” surgeon-in-chief to the “hopital de Verceil,” of a substitute for the method usually adopted in the excision of bones. We condense this article instead of translating it literally,

The desire to dispense as much as possible with the amputation of limbs has led modern surgeons to resort not unfrequently to the extraction of portions of bones and even of joints; but although less objectionable than amputation, such operations are always serious and not devoid of danger. They moreover frequently leave considerable deformity. The periosteum, like the bark of plants, constitutes the matrix of the bone which it encloses and nourishes. Yet by the operation as at present practiced, the surgeon removes not only the bone, but also the periosteum, whereas M. Larghi thinks that reflection should dictate the preservation of the matrix, by which alone a new bony deposit may be secured. M. L. censures the servile disposition of surgeons to imitate rather than to examine for themselves, and denies the validity of the reason given for the removal of the periosteum, viz: that it is usually found partaking of the disease of the bone. According to him, in neither of the cases of exsection hitherto performed is there any evidence that the periosteum was diseased: it was merely hypertrophied, and this hypertrophy so far from being a morbid condition requiring its removal, was on the contrary a physiological state, destined to the preservation or rather to the reproduction of a new bone. When a bone is affected, it would seem that nature takes care to increase the thickness and energy of the periosteum, whose secretion becoming more abundant tends to separate it from the diseased bone and ultimately to substitute for it a new bone. The periosteum in such cases becomes hypertrophied like the uterus, in order to minister to the development of the embryo it contains. Now, since no one has ever thought, in difficult parturition, of removing both the product and the uterus, let the matrix of bones no longer be “barbarously” destroyed; but on the contrary let the effects of nature for the expulsion and regeneration of the bone be seconded. If a fungus or cancer invade the periosteum as well as the bone, the conduct of the surgeon will of course be different. In such a case he will think neither of removing the bone without nor with the periosteum, nor indeed even of amputation, for the disease will certainly be reproduced, and art is unavailing.

M. Larghi proceeds to animadvert upon the unsparing injury inflicted upon the *muscles* in effecting the exsection of bones in the usual manner, and insists upon the importance of leaving them as much as possible in a state of integrity. By destroying the muscles, and bloodvessels adjacent to the portion of bone removed, the operation is made more serious and any process of reparation

effectually prevented. If a portion of the humerus, for example, be removed, and with it the periosteum and the muscular attachments, the motor powers of the arm are seriously impaired; yet this seems to have been overlooked by surgeons. The object being the removal of the bone and the preservation of the periosteum, this should be injured as little as possible. It should be slit open only so far as may be necessary to permit the extraction of the bone. If the portion of bone to be removed be short, it will suffice to make a longitudinal incision of the periosteum over the bone, taking special care to penetrate through the intermuscular space so as not to injure the muscles themselves. The edges of the incised periosteum are then to be separated, (which is facilitated by the gelatinous deposit usually found between it and the bone,) and the membrane carefully detached from the entire circumference of the bone. A flexible needle can be carried under and around the bone with a bit of tape, which being drawn along the bone at the same time that the muscles attached to the periosteum instinctively contract and elevate it, renders the separation easily accomplished. The preservation of the muscular attachments is therefore important. If there is any difficulty in thus effecting the separation, a little tepid water may be injected with advantage. The separation being complete, the exsection is effected in the usual way.

If the portion of bone to be removed be long it should be cut off at each end, the periosteum having been previously separated at these points, as above stated. By seizing one end of the bone with a pair of forceps it can then be readily drawn out of its envelop. In this manner a considerable length of bone may be extracted by making but a small incision down to each end, and consequently preserving the integrity of the intervening skin and soft parts. If the bone were already deprived of its periosteum, or if this membrane were partially affected, the exsection should be practised at this point, and the bone removed in one or more fragments as might be necessary. If the bone be unequally enlarged so as to present a knotty surface, it will be necessary to lay open the periosteum in its entire length, and after the removal of the bone to approximate its edges. This was done by M. L. in 1845, for the extraction of portions of the 7th, 8th and 9th ribs, with success. He also removed in this way the entire humerus from another patient, who recovered and retained the motion of the limb. In a third case he removed a portion of the right ileum, and restored the use of the leg which had been affected. The inferior portion of the ulna was also removed without injury to the movements of the wrist; and frequently the first phalangeal bone of the toe.

M. L. furnishes at length his reasons in favor of this method of operating in cases involving the ribs. The process he details is essentially such as above recited, and therefore need not be repeated here.

The Editor of the *Gazette Médicale* claims for M. Blandin the credit of having once removed a considerable portion of the clavicle, which was reproduced, the periosteum having been left. He does



not however furnish the date of the operation. An operation similar to that of Blandin was successfully performed by Prof. P. F. Eve, during the last winter. D.

*M. Küns New Instrument for the Diagnosis of Tumours.*—M Küns, Professor of Physiology in Strasbourg, presented to the Medical Society of that city, an instrument, the application of which is likely to produce the most beneficial results in the diagnosis of various kinds of tumor. It consists of an exploring needle, having at its extremity a small depression with cutting edges. On plunging this instrument into a tumour to any depth, we can extract a minute portion of the tissue of which its various layers are composed. In this manner a microscopic examination of the tumor can be practised on the living subject, and its nature ascertained before having recourse to an operation. We have proved the utility of this method of diagnosis on three occasions, and seen conscientious practitioners renounce an operation previously determined on, when the cancerous nature of the tumor has been demonstrated by the microscope.—[*N. Y. Journ. of Med.*, from *L'Union Medicale*.

*On the preparation of the Iodide of Mercurial Chloride.*—A skilful chemist, M. Boutigny, has been led accidentally to the composition of a new mercurial medicament, which seems already to have produced very advantageous effects in certain scrofulous affections. For this preparation:—R. Iodine (2at.) . . . . . 1579,5.

Proto-chloride of mercury (4at) 5948,5.

The calomel is pulverised, introduced into a matrass and heated gently, shaking it until it begins to sublime; the iodine is then added in small quantities, and the combination takes place with some sound and without any sensible loss of iodine. If, on the contrary, the iodine were added to the calomel before the latter was introduced into the matrass, a considerable portion of the iodine would be volatilised, and the compound thus obtained would be of unknown proportions and consequently of uncertain effect. The preceding preparation is employed externally by friction in the form of an ointment, or internally, in pills. The following is another formula, which contains two instead of four proportions of calomel:

Iodine (2at.) . . . . . 1579,5

Proto-chloride of mercury (2at.) . . . . . 2974,5

The mode of preparation is the same. This combination is intended to be run into cylinders, like the nitrate of silver, and we think that these cylinders will be employed with great success to deterge scrofulous ulcers, certain syphilitic chancres, &c.

The proportions given above may be altered, so as to diminish the quantity of iodine, if deemed advisable; but if the proportion of iodine were greater than that indicated in the second formula, a portion of the iodine would remain free and thus destroy the stability of the combination, a stability so necessary in order to secure a product which shall always be identical.

As to the name given by M. Boutigny to this product, *iodide of mercurial chloride* and *bi-iodide of mercurial chloride*, it is intended only to indicate the fact that it results from the direct action of iodine upon the mercurial chloride.

The two following formulæ are recommended by M. Boutigny to the attention of physicians :

*Ointment of the Iodide of Mercurial Chloride or anti-Scrofulous Ointment.*

R. Iodide of Mercurial Chloride in powder, 75 centigrammes.  
Fresh Lard, - - - - - 60 grammes.

*Pills of the Iodide of Mercurial Chloride.*

R. Iodide of Mercurial Ointment, pulverized, 25 centigrammes.  
Gum Arabic, - - - - - 1 gramme.  
Crumb of bread, - - - - - 9 grammes.  
Orange flower water, - - - - - q. s.

Make 100 pills.

Doctor Rochard has published in the *Union Médicale* some remarkable cases of scrofulous affections cured by the salt of M. Boutigny. He states that the energy of this salt is extreme, and that he has thought proper to use it only externally in the form of ointment. He recommends 15 grains of the salt to 3v. of lard. The quantity of this ointment to be employed must depend upon the degree of sensibility which varies much in different persons, but generally he uses at each friction a portion equal to the volume of a small pea. In general one friction per day will be sufficient, to be repeated for two or three successive days, and renewed afterwards at intervals of from eight to fifteen days, according to the effect produced. Great caution is necessary to avoid accidents. It is important to spread the ointment lightly, and not to persist in its use if, as sometimes happens, there should supervene pain, redness and signs of a too intense reaction. He employs it sometimes as a local, sometimes as a general remedy, and at other times endeavors to combine both modes of action, by exerting the friction alternately, directly upon the engorgements and ulcers, or upon the internal surface of the thighs, upon the back, the chest, &c. These general frictions have the effect of improving the entire organism, by increasing the activity of nutrition and assimilation. He begins almost always with them in inveterate diseases of a grave and hereditary character. The local effect is soon manifested; the portion of the skin upon which the ointment is applied begins to turn red, becomes the seat of itching and afterwards of smarting sensations, and finally of a true inflammatory tension; but this tension has but a short duration. It begins about an hour after the application of the ointment and disappears completely, with the smarting and redness, in the course of two or three hours. The epidermis scales off as occurs after erysipelas, and the skin then becomes very smooth and soft. In a greater degree of intensity it would produce vesication and even cauterisation. Upon ulcers there

is formed a small scab which is detached in the course of a few days, and leaves exposed a vermillion surface, instead of the violet and livid surface which previously existed. Unless the suppuration be very abundant, it is better to leave the parts naked than to dress them.

The general or constitutional modifications are less prompt, but can be gradually perceived in the increased activity of all the functions.—[*Translated from the Bulletin de Therapeutique.*

### MEDICAL INTELLIGENCE.

At a meeting of the President and Vice-Presidents of the American Medical Association held on May 8th, 1847, the following Standing Committees were appointed in pursuance of the order of the Association:

*"Committee of Arrangements.*—Dr. G. C. M. Roberts, Balt., Chairman; Drs. A. C. Robinson, Balt.; J. H. Briscoe, Balt.; J. R. W. Dunbar, Balt.; Wm. Power, Balt.; W. T. Leonard, Balt.; C. Bell Gibson, Balt.

*"Committee on Medical Sciences.*—Dr. S. Henry Dickson, S. C., Chairman; Drs. J. P. Jervey, S. C.; Robert Bridges, Philada.; J. W. Francis, N. Y.; Wm. T. Wragg, S. C.; Wm. Power, Balt.; T. Romeyn Beek, N. Y.

*"Committee on Practical Medicine.*—Dr. Joseph M. Smith, N. Y., Chairman; Drs. René La Roche, Philada.; John Harrison, La.; H. M. Bullitt, St. Louis, Mo.; J. B. Beck, N. Y.; Isaac Wood, N. Y.; G. S. Camman, N. Y.

*"Committee on Surgery.*—Dr. George W. Norris, Philada., Chairman; Drs. Isaac Parrish, Philada.; John Watson, N. Y.; A. L. Peirson, Salem, Mass.; J. Randolph, Phila.; H. H. McGuire, Petersburg, Va.; C. Bell Gibson, Balt.

*"Committee on Obstetrics.*—Dr. Harvey Lindsley, D. C. Chairman; Drs. G. C. M. Roberts, Balt.; J. Riley, D. C.; R. W. Haxall, Richmond, Va.; W. Channing, Boston; C. R. Gilman, N. Y.; S. Annan, Lexington, Ky.

*"Committee on Medical Literature.*—Dr. Oliver Wendell Holmes, Bost., Chairman; Drs. E. Hale, Boston; G. C. Shattuck, Jr., Boston; D. Drake, Louisville, Ky.; John Bell, Phila.; Austin Flint, Buffalo; W. Selden, Norfolk, Va.

*"Committee on Medical Education.*—Dr. Alexander H. Stevens, N. Y., Chairman; Drs. Amos Twitchell, Keene, N. H.; B. R. Wellford, Fredericksburg, Va.; Arnold Naudain, Phila.; R. D. Arnold, Savannah; F. Campbell Stewart, N. Y.; L. P. Bush, Wilmington, Del.

*"Committee on Publication.*—Dr. Isaac Hays, Phila., Chairman; Drs. Alfred Stillé, Phila.; J. V. C. Smith, Boston; I. P. Garvin, Augusta, Ga.; J. R. W. Dunbar, Balt.; Governor Emmerson, Phila.; Caspar Morris, Phila.

*Committee on Indigenous Botany, under the Resolution of Dr. N. S. Davis.*—Dr. N. S. Davis, Binghamton, N. Y., Chairman; Drs. S. W. Williams, Mass.; Eli Ives, Conn.; Engleman, Mo.; W. A. Cheetham, Tenn.; Jos. Carson, Penn.; Charles Short, Ky.; E. E. Phelps, Vt.; A. Twitchell, N. H.; T. C. Dunn, R. I.; Lyndon H. Smith, N. J.; James Couper, Del.; A. C. Robinson, Md.; Frederick Marx, Va.; J. P. Porcher, S. C.; J. Le Conte, Ga.; Cartwright, Miss.; Carpenter, La.; John M. Bigelow, Lancaster, Ohio; G. Norwood, Ind.; Merryman, Springfield, Ill.; Russel, Detroit, Mich.; J. Riley, D. C."

Some dissatisfaction has been expressed, that a number of gentlemen have been appointed to places in the various committees, who are not members of the Association. The New-York Journal of Medicine says:—"In regard to the 'Standing Committees' appointed in pursuance of the order of the Association, by the President, it strikes us as somewhat remarkable that *seven* at least of the gentlemen appointed, are not members of the Association, while many who have distinguished claims to such a distinction, have been entirely passed by. For example, the committee on 'Practical Medicine' embraces four gentlemen of this city, only one of whom is a member of this Association, and the same of



other committees. We doubt not those physicians, thus honored, will see the propriety of declining to serve, until they belong to the body, on whose committees they have been chosen, probably through inadvertence; and we have no doubt that the worthy President, when he is made aware of the dissatisfaction to which such irregularity inevitably gives rise, will speedily correct the error into which he has fallen. But few of the numerous Colleges represented in Convention, are honored by a place on any of the committees, while one school in this city furnishes chairmen for two committees. 'Honors divided' should be the motto in an Association, which assumes the title of *National*." Our Charleston friends seem to have been in high favor, for of the three gentlemen who represented the Profession in Charleston, one has been made a Vice-President, and the others are placed on an important committee, whilst a distinguished Professor of the same city, not a member of the Convention, has been placed at the head of the same committee.

An Account of the Mortality of Vera Cruz from the 15th to the 30th June, 1847, inclusive, derived from the Records of the Board of Health.

|                                   | Country.   |                    |      |    | From Venilo. |                              |                                  |           | From all other diseases. |    |    |    | Average daily mortality. |
|-----------------------------------|--|--------------------|------|----|--------------|------------------------------|----------------------------------|-----------|--------------------------|----|----|----|--------------------------|
|                                   | North Americans,<br>Mexicans, -<br>Other Foreigners,<br>Unknown, - | 92<br>41<br>4<br>2 | 57   | 85 | Americans.   | 9 m. Dep. and<br>all others. | Other Foreigners<br>and unknown. | Mexicans. |                          |    |    |    |                          |
| Total number of Cases.            | 143  | 92                 | 4    | 44 | 27           | 20                           | 2                                | 7         | 30                       | 15 | 2  | 37 |                          |
| Of which Americans.               | 74   | 20                 | 49   | 57 | 14           | 11                           | 4                                | 6         | 36                       | 13 | 16 | 43 |                          |
| All other Foreigners and unknown. | 2  | 104                | 42   | 57 | 6            | 9                            | 3                                | 5         | 76                       | 26 | 31 | 41 |                          |
| Mexicans.                         |  |                    |      |    |              |                              |                                  |           |                          |    |    |    |                          |
| Soldiers.                         |  |                    |      |    |              |                              |                                  |           |                          |    |    |    |                          |
| 9 m. Dep. and all others.         |  |                    |      |    |              |                              |                                  |           |                          |    |    |    |                          |
| Other Foreigners.                 |  |                    |      |    |              |                              |                                  |           |                          |    |    |    |                          |
| Mexicans.                         |  |                    |      |    |              |                              |                                  |           |                          |    |    |    |                          |
| Soldiers.                         |  |                    |      |    |              |                              |                                  |           |                          |    |    |    |                          |
| 9 m. Dep. and all others.         |  |                    |      |    |              |                              |                                  |           |                          |    |    |    |                          |
| Other Foreigners and unknown.     |  |                    |      |    |              |                              |                                  |           |                          |    |    |    |                          |
| Mexicans.                         |  |                    |      |    |              |                              |                                  |           |                          |    |    |    |                          |
| Average daily mortality.          | 9.46   | 9.53               | 6.51 |    |              |                              |                                  |           |                          |    |    |    |                          |
| For 1st days of June.             | 143  | 74                 | 20   | 49 | 14           | 11                           | 4                                | 6         | 36                       | 13 | 16 | 43 |                          |
| For month of May.                 | 2  | 104                | 42   | 57 | 6            | 9                            | 3                                | 5         | 76                       | 26 | 31 | 41 |                          |

*On Medical Reform.*—Medical Reformation appears to be engaging the attention of the profession in Canada, as well as in our country. It may not be uninteresting to our readers to see what steps are taken on the subject by our neighbors; we therefore copy from the British American Journal of Medical and Physical Science, a few of the clauses of a bill entitled "An act to incorporate the members of the Medical Profession in Lower Canada and to regulate the Study and Practice of Physic and Surgery therein":

"And be it enacted, That from and after the passing of this Act, no person shall practise Physic, or Surgery, Midwifery, or shall vend any drugs, medicines, or patent medicines by retail, or shall act as a Chemist or Druggist, in Lower Canada, unless he be a person duly licensed so to practise, or so to vend drugs and medicines or patent medicines, or to act as a Chemist and Druggist, either before or after the passing of this Act, under a penalty of \_\_\_\_\_ currency, for each day on which any person shall so practise, or shall act as a Chemist or Druggist, or sell any drugs, medicines or patent medicines contrary to the provisions of this Act: And such penalty shall be recoverable on the oath of any two credible witnesses, before any Justice of the Peace for the District in which the offence shall have been committed, and in default of the payment of such penalty on conviction, the offender may be committed to the Common Gaol of the District, until the same be paid: Provided always, that nothing herein contained shall extend to prevent any person duly licensed to practise Physic, Surgery, or Man-Midwifery in Upper Canada, from practising the same in Lower Canada, according to the provisions of the Act hereinbefore cited.

"To cause every member of the profession now practising or who may hereafter practise in Lower Canada, to enregister his name, age, place of residence, nativity, the date of his license and the place where he obtained it, in the books of the College.

"To appoint a Committee in each District for the purpose of occasionally inspecting druggist establishments and other places where drugs, medicines or patent medicines are sold, to ascertain that poisons are carefully labelled and kept apart, and that the drugs or medicines generally are of pure quality.

"And be it enacted, That the qualification to be required by the Board of Governors from a person about to commence the study of Medicine in this Province, shall be: A good moral character, and a competent knowledge of Latin, History, Geography, Mathematics and Natural Philosophy;—and that from and after the end of the year one thousand eight hundred and fifty, a general knowledge of the French and English languages shall also be indispensable.

"And be it enacted, That the qualifications to be required from a candidate for examination to obtain a certificate for a license to practise shall consist in his not being less than twenty-one years of age; that he has followed his studies uninterruptedly during a period of not less than four years under the care of one or more general practitioners duly licensed; and that during the said four years he shall have attended at some University, College, or Incorporated School of Medicine within Her Majesty's Dominions not less than two six months' Courses of General Anatomy and Physiology—of Practical Anatomy—of Surgery—of Practice of Medicine—of Midwifery—of Chemistry—and of *Materia Medica* and Pharmacy,—one six months' Course of the Institutes of Medicine,—one three months' Course of Medical Jurisprudence,—and one three months' Course of Botany, if obtainable in Lower Canada; also, that he shall have attended the general practice of an Hospital in which are contained not less than fifty beds under the charge of not less than two Physicians or Surgeons for a period not less than one year, or two periods of not less than six months each; and that he shall also have attended two three months' or one six months' Course of Clinical Medicine, and the same of Clinical Surgery.

"And be it enacted, That the qualifications to be enacted from a person intending to study to become a druggist shall be: the possession of a competent knowledge of Latin, with a liberal French or English education; his being at least sixteen years of age, and of good moral character.

"And be it enacted, That the qualifications to be exacted from a candidate for a certificate to obtain a license to sell drugs or medicines shall be: his being not less than twenty-one years of age; his having attended not less than two six months' Courses of Chemistry—two six months' Courses of Materia Medica and Pharmacy—one three months' Course of Medical Jurisprudence—and one three months' Course of Botany, if obtainable in Lower Canada; and moreover, that he shall have been uninterruptedly engaged in the compounding and dispensing of drugs and medicines during a period of not less than four years under the superintendence and care of some duly licensed general practitioner or druggist.

"Provided always, and be it enacted, That nothing in this Act contained shall be construed to prevent or prohibit any competent female from practising midwifery in Lower Canada, such female proving her competency before any two members of the College of Physicians and Surgeons and obtaining their certificate to that effect.

"And be it enacted, That any person vending spurious or adulterated drugs or medicines, or neglecting to correctly label the poisons in his shop and to have them carefully set apart in some place especially devoted to that purpose, or vending any poison without prescription or license of a duly licensed medical practitioner or the certificate of a clergyman recommending the purchaser for the purchase of the same,—shall, on conviction thereof before one Justice of the Peace, upon the oath of any one of the Committee to be appointed by the Governors of the said College for the especial purpose of inspecting druggist establishments and other places where drugs or medicines are sold, incur a penalty not exceeding for the first offence, and a penalty not exceeding for each and every subsequent offence, and may be committed to the Common Gaol until such penalty be paid."

*Mortality in New Orleans.*—From the 16th of April to the 26th of June, being nine weeks, there occurred 1019 deaths, 756 whites and 263 blacks. Of the deaths 334 were children under ten years. Among the most common causes of death we find Apoplexy 22; Consumption 107; Convulsions 24; Diarrhœa 50; Dysentery 80; Fevers 39, Typhoid Fever 54; Typhus Fever 49.

*Mortality in Prisons.*—In the Pennsylvania, where solitary confinement has been long practiced, 1 prisoner in 23 has died yearly; whilst at Charlestown, where the prisoners are allowed to mix together, only 1 in 84 has died during the same period.

*Buffalo University.*—At the first Commencement of this Institution held in the city of Buffalo, N. Y., on 16th June, the degree of M. D. was conferred upon seventeen approved applicants. This fact demonstrates that this infant institution enjoys the public confidence in a high degree. Our able and accomplished friends, Drs. Flint and Lee, are members of the Faculty of the University.

*Resignation of Professor Hare.*—Robert Hare, M. D., who for many years has occupied the Chair of Chemistry in the University of Pennsylvania, has resigned his professorship. In accepting his resignation the Trustees have adopted a complimentary resolution expressive of their sense of the eminent services which he has rendered to Science, and to the University.

*University of New-York.*—We learn from the Charleston Courier, that the vacancy in the Faculty of this University, occasioned by the death of Dr. Revere, has been filled by the election of Prof. Dickson of Charleston, who has accepted



the appointment, and resigned his professorship in the Medical College of the State of South Carolina.

*Obituary.*—At Berlin, aged 55, Prof. WAGNER, of that University. On the 4th May, at Tottenham, England, JOHN RAMSBOTHAM, M. D., in the 80th year of his age. In London, on the 3d May, JOHN READ, the inventor of the Stomach Pump.

METEOROLOGICAL OBSERVATIONS, for July, 1847, at Augusta, Ga. Latitude  $33^{\circ} 27'$  north—Longitude  $4^{\circ} 32'$  west Wash. Altitude above tide 152 feet.

| July. | Sun Rise. |           | 4, P. M. |           | WIND. | REMARKS.                     |
|-------|-----------|-----------|----------|-----------|-------|------------------------------|
|       | THER.     | BAR.      | THER.    | BAR.      |       |                              |
| 1     | 67        | 29 68-100 | 82       | 29 73-100 | N. E. | Cloudy.                      |
| 2     | 68        | " 77-100  | 71       | " 81-100  | N. E. | Rain, 60-100 of an inch.     |
| 3     | 62        | " 87-100  | 78       | " 66-100  | N. E. | Cloudy.                      |
| 4     | 66        | " 85-100  | 82       | " 83-100  | N.    | Cloudy.                      |
| 5     | 64        | " 83-100  | 84       | " 84-100  | N. W. | Fair—some clouds.            |
| 6     | 64        | " 85-100  | 83       | " 85-100  | E.    | Cloudy.                      |
| 7     | 68        | " 82-100  | 80       | " 78-100  | S. E. | Cloudy—sprinkle.             |
| 8     | 68        | " 73-100  | 80       | " 68-100  | N. W. | Cloudy—sprinkle.             |
| 9     | 68        | " 69-100  | 68       | " 67-100  | N. E. | Storm—rain 2 inches 5-100.   |
| 10    | 66        | " 66-100  | 78       | " 65-100  | S.    | Cloudy—sprinkle.             |
| 11    | 68        | " 68-100  | 78       | " 74-100  | S.    | Rain, 1 inch 70-100.         |
| 12    | 68        | " 80-100  | 82       | " 87-100  | S. W. | Cloudy—sprinkle.             |
| 13    | 68        | " 90-100  | 84       | " 87-100  | W.    | Fair—some clouds.            |
| 14    | 70        | " 82-100  | 86       | " 86-100  | S. W. | Fair.                        |
| 15    | 72        | " 75-100  | 88       | " 75-100  | S. E. | Fair—some clouds.            |
| 16    | 70        | " 83-100  | 85       | " 84-100  | N. E. | Cloudy—sprinkle.             |
| 17    | 68        | " 93-100  | 76       | " 93-100  | N. E. | Rain, 54-100 of an inch.     |
| 18    | 72        | " 98-100  | 76       | 30 2-100  | S. E. | Rain, 1 inch 45-100.         |
| 19    | 68        | 30 5-100  | 80       | 29 98-100 | S. E. | Cloudy—shower at 3, P. M.    |
| 20    | 70        | 30 4-100  | 72       | " 96-100  | S. W. | Cloudy—sprinkle.             |
| 21    | 71        | 29 96-100 | 81       | " 94-100  | S. E. | Cloudy—sprinkle at 11, A. M. |
| 22    | 68        | " 94-100  | 78       | " 93-100  | S. E. | Rain, 68-100 of an inch.     |
| 23    | 70        | " 98-100  | 78       | " 98-100  | S. W. | Rain.                        |
| 24    | 70        | 30 2-100  | 82       | " 98-100  | S. W. | Cloudy.                      |
| 25    | 72        | 29 97-100 | 82       | " 96-100  | S.    | Fair.                        |
| 26    | 70        | " 87-100  | 84       | " 77-100  | S. W. | Fair.                        |
| 27    | 71        | " 72-100  | 80       | " 67-100  | N. W. | Fair—some clouds.            |
| 28    | 66        | " 75-100  | 75       | " 77-100  | N. W. | Fair—some clouds.            |
| 29    | 66        | " 79-100  | 80       | " 77-100  | N. E. | Fair.                        |
| 30    | 64        | " 77-100  | 83       | " 73-100  | W.    | Fair.                        |
| 31    | 69        | " 75-100  | 70       | " 75-100  | N. E. | Rain, 2 inches 26-100.       |

10 Fair days. Quantity of Rain 9 inches and 28-100. Wind East of N. and S. 15 days. West of do. 12 days.

# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—OCTOBER, 1847.

[No. 10.]

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE XXXVI.

*Of Mercury and its Compounds.* By JOHN M. B. HARDEN, M. D.,  
of Liberty County, Georgia—Correspondent of the Academy of  
Natural Sciences, Philadelphia.

There is no substance probably to be found either in the organic or inorganic kingdoms of Nature which possesses more interest and importance than Mercury, whether we consider the beauty and variety of its Compounds, or its utility in the Arts and Sciences. The Chemist can experience ever new delight in studying its varied combinations. The Philosopher, by its means, is enabled to measure the temperature and weight of the atmosphere—to foretell with some degree of certainty the approach of typhoons and hurricanes, and to determine the relative heights of different localities on the Globe. The Artist employs to great advantage many of its amalgoms. The votary of the toilet finds in them a just representative in the *reflected image*, and in the daguerrian process it brings out the photographic *likeness* with the magic of Aladdin's wonderful lamp. But it is in Medicine that it has attained its highest reputation, and it is to some of its more simple compounds and their effects upon the animal system, that we design in this article to direct attention.

Mercury seems not to have been familiarly known to the ancients, although it is distinctly alluded to in the writings of Aristotle, Dioscorides and Pliny, the latter of whom gives us a very correct method of obtaining it from its ores. He speaks of it under the names of "*Argentum Vivum*," and "*Hydrargyrum*," and evidently intends to make a distinction between the substances designated by these terms, but I think we may conclude from the very little that he says upon

the subject that they were *identical*. The "*Argentum Vivum*" he denominates also, from its fluid properties, "*Vomica liquoris aeterni*," and says it was found in an ore obtained from veins of Silver. The following are the properties he ascribes to it:—it corrodes and destroys all vessels (probably meaning only metallic). All things float upon it, except Gold (proving that next to Gold it was the heaviest substance known). The best way, to purify it, was by shaking it well in earthen vessels into which cloth or articles of wearing apparel were thrown (these last absorbing its dross). To separate it from Gold, the amalgam was thrown into skins that were strongly pressed or kneaded with the hands so as to cause the Mercury to escape by the pores, and leave the Gold pure.

The "*Hydrargyrum*," compounded of two Greek words, *ὕδωρ* and *αργυρος* signifying *fluid Silver*, was obtained from an ore called by him "*Minium*," or more correctly, the "*Secundarium*," a kind of refuse ore of *Minium*. It is plain, however, that the *Minium* spoken of by him is not the *Minium* of the present day, which is nearly a pure peroxide of Lead; but that he must have intended the ore known to us as "*Cinnibar*," consisting for the most part of Sulphur and Mercury, forming the Sulphuret of Mercury. The word "*Cinnibar*," however, as used by Pliny, he tells us, was of Indian origin, and was applied to designate the *mixed Blood* of a *Dragon* and *Elephant* who had been *mutually killed by each other*. The process, which he gives for procuring the Mercury from this ore, is so similar to that employed at the present day, and shows, withal, so great a degree of chemical knowledge, at so early a period, that I must beg to have it here recorded in his own words:—He says, "*fit autem duobus modis: aereis mortariis pistillisque trito minio ex aceto: aut patinis fictilibus impositum ferrea concha, calice coopertum, argilla superillita: dein sub patinis accensum follibus continuo igni, atque ita calicis sudore deterso, qui fit argenti colore et aquae liquore. Idem guttis dividi facilis et lubrico humore confluere.*"

It is now, as formerly, obtained by distillation from native *Cinnibar* or Sulphuret of Mercury. In order to purify it, it is recommended to re-distil it with half its weight of iron turnings, or by digesting the metal with a small quantity of Nitric Acid or with a solution of Chloride of Mercury, which rids it of the metals more oxidable than itself.—(Graham.)

The name *Mercurius* or Mercury was first given to this metal by the alchemists, from some fancied resemblance to the planet of that



name, as they gave the name of Mars to Iron, Saturn to Lead, Luna to Silver, and Venus to Copper—or more probably in honor of the god Mercury on account of *its extreme mobility*. It is well known to be perfectly fluid at the ordinary temperatures of the atmosphere and has a silvery metallic lustre. Its constant fluidity has caused some philosophers to consider it as a *peculiar metallic water*, and in consonance with the Greek "*Hydragyrum*," they have denominated it "*Aqua non madefaciens manus*."

Its chemical symbol is Hg. Graham gives its equivalent as 1265.8, or adopting the Hydrogen scale 101.43, but a very recent and careful examination of this metal by M. Millon, has determined its true equivalent to be an exact multiple of Hydrogen by 100, making it 1250.6. This result has been confirmed by the experiments of Erdman and Marchand.—It has a density varying according to temperature from 13.5 to 14, which is said to be its density in a state of congelation which takes place at about 39° or 40° below Zero of Fahrenheit's thermometer.

Mercury forms two compounds with Oxygen. The first is the *Black oxide*, *Sub oxide*, *Mercurous oxide*, and is the same substance as that called *Æthiops per se* by the older writers, consisting, as is now believed, of two equivalents of Mercury and one of Oxygen. It is obtained in various ways. The easiest and most common are to triturate the metallic mercury with conserves or unctuous substances, as is done in the preparation of the *Blue mass* or *Blue pills* and *Mercurial ointment*, or probably better by mixing briskly together a cold solution of Caustic Potash and Calomel. This seems to be, however, a very uncertain and unstable combination, and has a great disposition to be reduced to the state of metallic mercury and the binoxide or simple oxide. Indeed it has recently been announced by M. Guibourt, that in this mixture nothing was formed but the binoxide and metallic mercury, and M. Lefort has confirmed the opinion. I have taken a little pains to test this point myself, and having preserved the precaution suggested by M. Donovan of keeping it excluded from the light, I have set aside the oxide thus formed for many days, and after that time have not been able to detect, by the aid of a glass, the least globule of Mercury in it—thus tending to prove that the Oxygen had really entered into combination with the black particles; nor could I discover the least appearance of the red oxide.

In the case of the pharmaceutical preparations above alluded to,

however, the state of things appears to be very different. From the experiments given to us by Dr. John Warren in his View of the Mercurial Practice—and indeed from the general belief, we had concluded that in these there was the formation of the *Black oxide*. I was therefore somewhat surprised to see it stated by Mr. Graham, “that there can be no doubt that it is in this divided state, and not as the *Black oxide*, that Mercury is obtained by triturating it with fat, turpentine, syrup, &c., in many pharmaceutical preparations.” I therefore put it to the following simple experiment: I poured a strong solution of Caustic Potash repeatedly upon a portion of strong mercurial ointment that had been standing fully 17 years. After dissolving out all the fatty matters the residue seemed to consist for the most part of metallic mercury and the black oxide. I did not determine the relative proportions, but certainly a large quantity of Mercury was found in the metallic state—but that a good portion also remains as black oxide, I could not deny without doubting the evidence of my senses. Besides, the experiment does not even make it necessary for us to suppose that any of the Mercury was in the metallic state while the compound remained as mercurial ointment. For it is possible that the presence of the Potash in the mixture induced the formation of some highly oxidized organic acid, whose oxygen was obtained at the expense of the *Black oxide*, and which afterwards united with the Potash.

However this may be, it is very certain that these preparations act upon the system, and produce all the peculiar effects of Mercury; and it seems more reasonable to suppose that the oxide would act more readily than the metal, because more soluble; but we must confess that upon this point there is great uncertainty, for from all that we know of their properties, the Oxide is as insoluble as metallic Mercury, and Calomel more insoluble than either.

This same Oxide is formed when Limewater is poured upon Calomel in place of the Potash, and is the way indeed in which the London Pharmacopea directs the preparation of this black oxide. I know not whether it has ever been recognized as an officinal preparation; but this mixture of Limewater and Calomel is familiarly known among practitioners as the “*Black wash*,” and has been much used for the cleansing of venereal ulcers, and I believe with good effect, but surely its good effects must be more attributable to the Chloride of Lime which is formed, than to the Oxide of Mercury, and appears to me to be one of those incompatible compounds made by those

unacquainted with Chemistry where the effects are ascribed altogether to a wrong agent.

This Oxide of Mercury in the form of *Blue Pills* is applied to most of the purposes for which Calomel is used, and seems to produce very nearly the same effects. They are both of them, in my opinion, very uncertain in their operation, but when I have had occasion to use them, I have generally given a preference to this, believing it to be probably milder in its action.

The other combination of Mercury with Oxygen has usually been regarded as a binocide, although it is now found to contain one equivalent of each ingredient. It is known under various names, as the *red oxide*, *red precipitate*, *oxide of mercury*, *mercuric oxide*, and is prepared either by oxidating the Mercury at a high temperature, or by expelling all the Nitric Acid from the Nitrate of Mercury by the application of heat. The same Oxide is obtained by mixing together a solution of Caustic Potash and Corrosive Sublimate, but instead of being red, it is precipitated as a powder of a lemon yellow color. When Limewater is used in place of the Potash, we have the same precipitate formed; and this mixture is the *Aqua phagedenica* of the older writers, and is familiarly known as the *Yellow wash*, which, like the *Black wash* already spoken of, has been used for the treatment of ill-conditioned ulcers of various kinds, more particularly those of a venereal character.

It is interesting to inquire into the cause of this difference of color. My own impression had always been that the *red precipitate* was anhydrous, while the yellow was thrown down as a hydrate, and that this presence or absence of water was the sole cause of the change. M. Millon has recently declared, however, contrary to the observation of M. Schanffur, who has described a hydrate of the peroxide containing three equivalents of water, that a "*hydrate is not to be found among the interesting modifications which are presented by the red oxide of Mercury.*" From his experiments it appears that the two oxides are entirely *isomeric*, and the difference in color depends altogether upon their states of molecular aggregation, the red being *crystalline*, while the yellow is *amorphous*. This change of color from a simple change in the arrangement of alternate molecules is certainly an interesting fact, and is not confined to this combination alone. It is remarkable in Charcoal and the Diamond, and I have seen the Iodide of Mercury suddenly change its color from a simple touch by which its least particle was moved. A similar phenomenon



is witnessed in those toys of unannealed glass, known as Ponce Ruperts drops, where the least particle broken off, will cause a sudden and complete disaggregation of the whole mass.

Notwithstanding this perfect identity of composition noticed by M. Millon, these two Oxides exhibit another curious anomaly worthy of notice, and that is a difference in their chemical reactions. For example:—While Oxalic Acid will attack the yellow Oxide directly and produce a white Oxalate, the red Oxide resists completely its action. It may be made to boil in the same solution which attacks so readily the yellow Oxide, without changing in the least degree the red color. So also, in an alcoholic solution of the Bichloride of Mercury, the yellow Oxide is converted by boiling into a *black Oxichloride* while the red Oxide suffers no change by the same treatment. A similar difference is shown also in the reactions of the Bichromate of Potash.

This *red oxide*, or *red precipitate*, as it is more commonly called, acts with great energy upon the body, and is among the most powerful escharotics used in Surgery. It corrodes the part to which it is applied, and may be used with advantage in the cure of all indolent, ill-conditioned ulcers, particularly where we have reason to suspect a venereal taint, and for the destruction of fungous growths.

Probably the most interesting compounds of Mercury, in a medical point of view, are produced from its combinations with Chlorine, forming the well-known substances *Calomel* and *Corrosive Sublimate*. The first, or Calomel, is a sub-chloride, formed of two equivalents of Mercury and one of Chlorine. It is obtained by various processes, and I need not stop here to specify them as they may be found in any of our dispensatories, and for a good account of Calomel and its history, I refer with pleasure to an article which was published, by Professor Means, in the first volume, N. S., of this Journal.

Calomel is absolutely insoluble in water, Alcohol and Ether, and upon the maxim that "*Corpora non agunt nisi sint soluta*," it is difficult to see how it can act at all upon the human body. The only rational explanation is, that it meets in the alimentary canal with some fluids in which it is partially dissolved; and the fluids in the stomach most likely to bring about such a result are the Hydrochloric Acid and the Chloride of Sodium, both of which, with free acetic acid, have been found in the gastric juice. "According to Mialhe, Calomel is in part converted into corrosive sublimate and metallic mercury by muriate of ammonia and by the Chlorides of Sodium

and Potassium, even at the temperature of the body, and hence he believes that the conversion may take place in the *primae viae*.”—(Woods & Bache.) “Dr. Gardner denies the assertion of M. Mialhe, that Calomel is converted into Corrosive Sublimate by Chlorides of the alkalifiable metals, maintaining that it is merely rendered soluble by their solutions.”—(*Ibid.*)

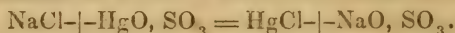
However this may be, one thing seems to be certain, that both this compound and the Blue mass depend for their operation entirely upon the state of the stomach and bowels at the time when they are given, and it is upon this ground that may be explained the impunity that many enjoy from its toxicological effects after the ingestion of the enormous and uncalled for doses of which we have heard and read as having been given in yellow and low typhoidal fevers. In such cases we may reasonably suppose that there is no secretion of normal gastric juice; and again, so completely paralysed are all the parts of the system that there cannot be an absorption by the lacteals or other vessels. In such conditions of the system the Calomel would have no more effect than so much sand, whereas in an opposite condition, when every thing favors, a very few grains would produce effects the most violent. It is said that salivation has been induced by  $1\frac{1}{2}$  gr. of Calomel, and I have had my salivary glands very sensibly affected by less than 3 grains.

When Calomel is suspended in water or other fluid, and we pass through the mixture a stream of Sulphuretted Hydrogen, there is immediately formed a *black compound*, the *sub-sulphuret of Mercury*, and in cases in which a large quantity has been introduced into the bowels the same result takes place, by which of course the contents of the bowels are blackened, and there is a discharge of very dark colored and generally very offensive *fæces*. Now this effect of Mercury appears to me to have been very badly interpreted oftentimes, as may be seen by reference to the books. These stools have been regarded as the consequence of depraved secretion from the violence of diseased action, and as the harbinger of the *peculiarly successful operation* of the *Calomel*: so apt are we to substitute *effects* for *causes*. Dark colored stools are often produced in a similar way, under the use of the Subsals of Iron, as I have often witnessed. The iron may either unite so as to form a subsulphuret, or the better explanation probably is, that it meets in the alimentary canal with gallic acid, derived from the vegetable food taken at the time by which a sort of *ink* is actually formed. While upon this point, I

would here make the following general remark, and this is, that the color of our evacuations are more frequently owing to the nature of our *ingesta* than to the nature of our disease, and consequently that in studying to estimate their semeiological values, we should be careful to distinguish *diseased secretions* and *chemical reactions*.

Calomel is certainly the preparation of Mercury, which has been most extensively used in Medicine, and has been given in every disease in which this mineral has ever been supposed to be beneficial. Like the Blue pill of the Black Oxide, it is cathartic in its operation when given in doses to an adult of 15 or 20 grains; but as we have already said, it is uncertain in its action, although many persons prefer it to any other cathartic for the certainty and mildness of its operation. I have known other persons who are very much sickened by it at all times, and are made to faint at the time of its action upon the bowels. Calomel is often very beneficial, as an external application, in powder, to obstinate indolent ulcers.

The other combination of Mercury with Chlorine is composed of one equivalent of each ingredient, and consequently is a simple Chlorine of Mercury. It was at one time known as the Bichloride, while Calomel was considered to be the Chloride, but a more careful examination has led to the change of opinion. This is the Corrosive Sublimate or Corrosive Chloride of Mercury of the shops, and is certainly one of the most corrosive poisons with which we are acquainted. It is most commonly obtained by sublimation from a mixture of Sulphate of Mercury and common Salt or Chloride of Sodium, and the chemical changes are beautifully expressed by the following formula:—



When this salt is mixed with the Muriate of Ammonia, Chloride of Ammonium, or Sal Ammoniacum, there is found the well known triple salt, the Chloride of Mercury and Ammonia, a salt which was highly esteemed by the Alchemists, and has received from them the names of *Sal Alembroth*, *Salt of Wisdom*, *Salt of Art*. We are not exactly apprized of those peculiar qualities which entitled it to such distinction. It is said to have been intended “to facilitate the dispensing of Corrosive Sublimate in small doses.” If the Corrosive Sublimate is only made milder in its operation by the Sal Ammoniac, it is a preparation still worthy of our attention.

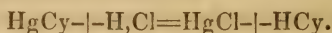
Corrosive Sublimate forms a dense crystalline mass which is very soluble in water, alcohol and ether. It forms an *insoluble compound*



with albumen, and hence this substance affords the very best antidote, to its poisonous operation, that we possess—while, at the same time, it warns us of the very disastrous results that must necessarily follow the introduction of this Poison into the Blood, even in quantities the most minute. It is estimated by Mulder, that to form this compound with fibrine so as to destroy its vitality, it is only necessary for them to unite in the ratio of 6361 parts of the fibrine to 1 of the corrosive sublimate, or in other words, one part of the salt introduced into the blood would convert 6361 parts of fibrine into this *insoluble compound*, which must either be eliminated by the natural emunctories or be deposited in the tissues as a kind of foreign matter. Now who does not see the great analogy that must exist between this product and that which is commonly known as scrofulous and tuberculous matter, and who is not led reasonably to suspect that the indiscriminate and wanton use of Mercury, in all its forms, may be swelling annually the list of victims to tubercular *Phthisis*, whose increasing ravages seem to me in some measure to have been proportioned to the increased use of Mercury in the Practice of Medicine. Let those who tamper with this article of the Materia Medica, as a *harmless drug*, weigh well the question which is here submitted. Liebig says, “It is obvious that if arsenious acid and corrosive sublimate are not prevented by the vital principle from entering into combination with the component parts of the body and consequently from rendering them incapable of decay and putrefaction, they must deprive the organs of the principal property which appertains to their vital condition, viz., that of suffering and effecting transformations; or, in other words, organic life must be destroyed.”—(*Agricultural Chemistry*.) This subject is possessed of a tenfold interest, when we take into consideration the recent experiments of M. Millon and Laveran, on the permanent retention of metallic substances, but more particularly of Antimony in the vital organs. We will revert to it again when examining the effects of Mercury upon the Body. In regard to this particular form of the remedy, however, we must remark that in those cases where we wish to introduce it slowly into the system, more especially in the *Venereal disease*, we decidedly prefer the Corrosive Sublimate to any other preparation of Mercury. I have had within a few years past an opportunity of demonstrating its decided value in the disease.

These ordinary compounds of Mercury have of late been superseded in part by a number of new and more fashionable remedies,

which have been brought to light by the labors of Chemists, and like every thing *new*, each has had its admirers and an appendix of successful cases. I need not do more than briefly to allude to them, making such casual remarks as may be suggested in passing. They will all be found described by Dr. Dunglison, in his work on *New Remedies* and their principal virtues, so far as known, pointed out. The most of them are combinations of Iodine and Bromine with Mercury. Among the *new remedies* of Dr. Dunglison, I was surprised to find the Cyanide of Mercury, a compound which has been long known to the chemist, if not used by the physician; and has afforded the best means of procuring the Hydrocyanic or Prussic acid. The best way of obtaining this acid is by heating in certain proportions the Cyanide of Mercury with Hydrochloric acid, or to obtain it, anhydrous Sulphuretted Hydrogen may be used in the place of the Hydrochloric acid. The reaction in this case is expressed by the following formula :



—the product being Chloride of Mercury and Cyanide of Hydrogen.

Among the preparations of Mercury and Iodine is one which was first brought to the notice of the physicians of this country by Dr. W. Channing, of New York, in a paper published in the "*American Journal of Medical Sciences*," many years ago. It was so highly recommended in the paper referred to, that I immediately prepared some of it according to the formula given by Dr. Channing, and used it in a few cases. My experiments with the remedy have been few, and by no means satisfactory. It seems, however, to be an interesting compound, consisting of Iodine, Mercury and Potash, probably of an equal number of equivalents. I am not acquainted, however, with its chemical formula. It is called by Dr. C. the Iodo-Hydrargyrate of Potash.

Of the Bromides, we can say nothing from our own observations. It appears that Bromine unites with Mercury in two proportions, forming the subbromide, and the Bromide. They are both colorless compounds, and bear in many respects a close analogy to the two compounds of Mercury with Chlorine, of which we have already spoken.

Mercury unites also in several definite proportions with Nitric acid. It forms with the black oxide the Nitrate and Subnitrate, the first of which may be obtained by simply pouring the Nitric acid upon metallic Mercury in the cold. It is insoluble except in an ex-

But, besides these, M. Millon has detected and described four others formed by the action of Nitric acid on the bioxide of Mercury, whose formulae I beg leave to give here, as the result of the latest investigations :

- |   |       |                       |
|---|-------|-----------------------|
| 1. Syrupy Nitrate,                          | - - - | $AzO^5- HgO- 2HO$     |
| 2. Nitrate, crystallized in needles,        |       | $AzO^5- HgO- HO$<br>3 |
| 3. Nitrate, crystal. in rhomboidal laminae, |       | $AzO^5- _2HgO- HO$    |
| 4. Nit. in crystalline white powder,        |       | $AzO^5- _3HgO- HO$    |

Another view, however, has been taken of the composition of this *Ammoniacal Amalgam*, suggested by "*the remarkable and apparently peculiar aptitude of Mercury to combine with Amidogen, and by the position which Hydrogen holds among elementary bodies which is that of a metal of the magnesian class.*" According to this view, then, the Mercury forms the amalgam by uniting directly with Hydrogen, and the Amide of Mercury by uniting with amidogen, so that these two compounds are mixed together. It is here seen how forcibly these combinations of Mercury tend to establish the existence of that class of compounds which are known as AMIDES, in which the radical is *Amidogen* ( $\text{NH}_2$ )—containing one atom less of hydrogen than ammonia—and making ammonia indeed an *Amide of Hydrogen*.



We proceed now, in the second place, to notice the effects of Mercury upon the animal system. It seems to have been universally considered by the ancients as a dreadfully destructive poison. Dioscorides describes it as a corrosive that destroyed the stomach and bowels, by eating holes through their coats. Pliny applies to it the words "*Venenum rerum omnium,*" and yet he does most explicitly speak of the use of the Minium or Sulphuret of Mercury in the practice of Medicine. It seems that it was applied to wounds of the abdomen and head, for the purpose of stopping the flow of blood, provided care was taken not to allow it to penetrate internally. His words are as follows: "*Quod cum venenum esse conveniat, omnia quae de minis in medicinae usu traduntur, temeraria arbitror: praeterquam fortassis illito capite ventre, sanguinem sistendum, dum ne quid penetret in viscera, ac vulnus, attingit: aliter utendum non equidem censeam.*" Galen, it is said, considered it as a poison, "*which was unfit for use as a medicine.*"

The credit of first introducing it to general use, as a remedy, is ascribed to the Arabians, who are said to have cured diseases of the skin, by an external application of it in the form of ointment. From analogical reasoning, it was afterwards adopted as a remedy in Syphilis. It seems to have been confined principally to those cutaneous diseases until the year 1735, in which year it was used by the physicians of New England, in the treatment of a febrile disease attended with ulcerations in the throat, which was known as the "*Throat Distemper.*" After this, it was used in the treatment of small-pox and gradually its use was extended to febrile and inflammatory diseases in general, such as Pleurisies, Peripneumonies, Quinsies, Rheumatisms, &c., &c.—(Vide View of the Mercurial Practice, by John Warren, M. D. Boston: 1813.) It seems to have gained an important advance in reputation among medical men, from its supposed utility in the treatment of that most formidable disease the *Yellow fever*. Physicians began at one time to believe that, although they had to deal with a Herculean disease, they had a remedy whose powers were entirely adequate to its complete expulsion out of the system—and the reputed success of Dr. Chisholm and others in the West Indies, and of Dr. Rush in Philadelphia, in the year 1793, soon established for a time the *Mercurial Practice* in the treatment of all our climate fevers; and by an easy transition it has been since applied to all diseases attended by visceral derangements and more particularly to hepatic affections.

Since that time Mercury has been regarded as the "*Sampson*"\* of the *Materia Medica* by many practitioners, without which they could hardly practice Medicine at all, and it is almost incredible, the extent to which it has been used in the treatment of almost all the diseases† to which "*flesh is heir*." In the use and recommendation of the Poison, it seems scarcely to have entered into the minds of its advocates, that if it was powerful for good it might also be powerful for evil; but on the contrary, it seems to have been the general impression, that if it did no good it could do no harm. The use of Mercury in diseases of the East Indies, and tropical climates in general, is well known, and could we trust in full the statements of the many writers upon the diseases of those climates, we must consider it as a sovereign remedy for all Hepatic affections incident to those localities. We remember no writer from Dr. Johnson to Dr. Budd, who has not recommended it highly in these cases, although we are under the impression that there have been some misgivings in the minds of the more recent authors in regard to all the good previously anticipated from its use. Was the bile secreted in too great quantities, as in some fevers "*mali moris*," Mercury was given to check the inordinate action of the liver—was there torpor in the system and a want of action in this last named viscus, Mercury was given to stimulate the blood-vessels, and the glandular system *particularly*, so as to arouse the liver from its lethargy, and induce the normal secretion of bile, giving to the remedy in this way "*a sort of equalizing or balancing influence over the system*."

Now when we come to examine into the evidence in favor of all these reputed advantages of Mercury, it will be found to be exceedingly unsatisfactory to a philosophic inquirer after the truth. Evidence either for or against a remedy must be founded upon statistical data, or facts carefully collected by *competent* observers; and these facts should be collected, not as against some other remedy or course of treatment, but as against no remedy at all, and no treatment except that which is strictly Hygienic. Or, in other words, to determine

\* We are of opinion that the symbol under which Mercury should be represented in Medicine, would be Sampson holding in his right hand the jaw-bone of an ass, with the inscription "*the Sword has slain its thousands, but Mercury its tens of thousands*."

† To show the extent to which Mercury is used at present by some, I would state that in a late work on Southern Practice, it is recommended in 5-6th of all the diseases treated of, in some form or other of the remedy, and in some stage or other of the disease.

the value of a remedy, we must not compare it with another remedy, but ascertain whether the case has been at all modified by its power, so that without its use the patient must have died. It is by comparing the ratio of a number of cases of the same diseases recovered, to those which terminate fatally, without any treatment except good nursing, to the ratio of the number of cases of the same disease recovered, to those which terminate fatally, where the treatment pursued has been with Mercury and *Mercury alone*. It must be evident, that to compare one remedy with another, will only give us the relative effects of the two, without establishing the absolute good or bad effect of either, and in this way we may propagate from generation to generation the use of a very bad and hazardous remedy, by contrasting its operation with some other modes of treatment even more incendiary and destructive. Whereas, were we to compare either or both modes of treatment with the treatment which Nature suggests, or even with the *nugatory systems* adopted by the Homœopathists, we might be led speedily to discard them both.

Now such appears to me to be the blind evidence on which rests the reputation of Mercury in many diseases. It will be found upon a careful examination, that in all cases where it has gained the ascendancy it has been by contrasting it with other modes of Practice which were not as good. It may be replied to me, that of two evils we must choose the least, and of two remedies choose the better, upon the ground that "*anceps remedium potius quam nullum*;" but I answer that it is the part of prudence and wisdom to choose no evil when you may avoid it, and the maxim is only correct when we must choose the one or the other. Let us refer for an example of the testimony in favor of Mercury to the declarations of some whose experience, as given to us by Dr. Warren, in his work above referred to in the treatment of Yellow fever. In the Island of Trinidad, Dr. Clark observed that in the Yellow fever of 1793, "where there was time for salivating Mercury was always successful." In order for his testimony to have *full force*, he should have been prepared to tell us how many, under similar circumstances, would have died under the care of a nurse. In Dominica, Dr. Fullin asserted that the proportion of the mortality under the treatment by Mercury was about 1 to 5, and 1 to 2 under any other treatment. From this we only legitimately draw the conclusion that the other modes of treatment *were exceedingly bad*—because farther on we learn that in Antigua, where D. Byam used Mercury, in the decline of the epidemic, the propor-



tion of deaths was 1 to 2. In the Island of St. Thomas the success with Calomel was not great. "In the *Royal Artillery* the mortality was greater than had ever been known in a tropical climate; yet, *compared with other modes of treatment*, it was on the whole the most successful." This last quotation is peculiarly in point, and most clearly shows that in the use of Mercury we have not yet arrived at the best mode of treatment.

But the chief support of the Mercurial Practice is to be found in a *by authority, prophetic*, IPSE DIXIT, passing from generation to generation, and not upon the true basis of well-attested and collated facts. This evil in Medicine has long existed, and I am glad to say has been detected, and its total abandonment may soon be predicted when we see the effects which are being made by M. Louis and his associates to bring about the "*numerical method*" and *other correct modes of observation*. This being the case at present, however, we may adduce similar evidence against its use that we have found in favor of it. The views of Dr. R. Jackson were directly opposed to its use in Yellow fever, except as an evacuant. "From the use of it in St. Domingo, he concluded, that in slight cases of Yellow fever when the mouth is affected, the fever is observed to be diminished, *but this seldom takes place* till the disease has abated; for when the disease is violent, no salivation can be produced. Hence he advances the opinion that salivation instead of being the *cause* of the abatement of the disease, is only a signal of its departure." With these views we perfectly coincide, as will be perceived by our remarks already made when speaking of *Calomel*. Dr. Lind's experiments are also corroborative of this opinion. "Fifteen cases were treated with Mercury from the first day—*five died, in three of whom salivation took place—five, who were not salivated, recovered*. The other five who recovered were salivated, but, as usual, not till the violence of the symptoms had passed off." Other cases might be brought forward of a similar kind, but we forbear—our object now being simply to show the equivocal nature of the evidence in favor of Mercury as a remedy in *Yellow fever*. The same remarks will apply, however, with equal force to it as a remedy in all our idiopathic or essential fevers.

But is there better evidence in favor of its powers as an *anti-syphilitic*? There has been a time when, to question this, would have been to subject ourselves nearly to the suspicion of lunacy. This has been heralded as one of the great triumphs of Medicine, and we

had congratulated ourselves that we had found at least *one specific* in the cure of disease—but oh! the inquisitorial *daring of French Philosophy!* Even *this is denied* as an *achievement* of our *Divine Art*; and the *sensualist* is deprived of the satisfying reflection that, if it is *easy to be pored, it is easy to be cured!!!*

Some have gone so far as to assure us that Mercury is entirely unnecessary in the treatment of this disease. Others have labored to prove that many of the very worst symptoms connected with the secondary forms of the disease are entirely the effects of mercurial remedies—although it is admitted on all hands, I believe, that these symptoms do sometimes occur where Mercury was not used, proving the very close resemblance, in external form, between venereal and mercurial diseases. Most of the anti-mercurialists admit, however, that there are some cases which yield more readily to the mercurial than to any other mode of treatment.

We have not time nor space to enter fully upon this question *here*. It must be acknowledged that it is still in a very unsettled state. We have not the data upon which we may rest any thing like a just conclusion in regard to the comparative merits or advantages of the two modes of Treatment. Nor have practitioners carefully distinguished between the Symptoms which are truly venereal and those which have resulted from the poisonous operation of the remedy itself. I think, however, that the following propositions will be generally admitted to be true:

1. That there are many simple cases of the Venereal Disease which may be treated successfully *without Mercury*.
2. That there are many cases of so called secondary Syphilis where the symptoms are hardly distinguishable from those of true Syphilis, which are *entirely the result of the poisonous effects of Mercury*.
3. That there are secondary symptoms resulting from the *venereal virus alone*, where *no Mercury had been used*.
4. That there are many cases of the Venereal which will not yield to the simple treatment, *which are found to yield speedily to the use of Mercury*.
5. That in judicious hands Mercury may still be considered as the *best and most efficacious remedy which we possess in the treatment of Syphilis*.

Let us now take a hasty glance at the peculiar *modus operandi* of this Medicine and a few of its more peculiar and specific effects.

Mercury, like all other medicines, must now be considered as act-

ing upon the system through two media—the Nerves and the Blood-vessels. No one has ever doubted the sympathetic action of this or any other remedy; but it has been common to deny its entrance into the blood-vessels. Experiments and observations have, however, completely refuted the objections urged against it, and I believe that none who has kept pace with the progress of Science will now oppose the opinion. “Dr. Hamilton long ago detected globules of Mercury in the milk of a salivated woman. Fourcroy’s authority may be adduced to confirm a similar fact, when he declares it as his opinion that the Mercury found in the bones arises from the superabundant part of the oxygen being absorbed by the stomach.”—(Warren op. cit.) Orfila declares that Corrosive Sublimate is absorbed in certain cases, and says that it “may even change its nature in such manner as to appear under the form of *globules in the large cavities of the body, in the viscera, in the joints, in the bones, in the sheaths of tendons: as has been proved by a number of authentic facts.*”—(A general system of Toxicology, by M. P. Orfila, vol. 1, p. 47.) “M. Pickel, Professor of Chemistry at Wartsburg, obtained metallic mercury on distilling the brain of a person who had been long taking mercurial preparations.”—(Ibid.) “Zeller states that he found Mercury in the Bile; and Wepfer, Laborde, Brodbelt, and others, mention instances in which this metal was found in the bones of persons who had died after several tedious mercurial courses.”—(Eberle. Therapeutics, vol. 2, p. 299.)

M. Oesterlen has performed a number of experiments on animals with the view of determining this question, and the results obtained are as follows:—

1. “It is indubitable that Mercury may pass *in the metallic state* through the parietes of the blood-vessels, since minute globules of it have been found in the subcutaneous cellular tissue and in the veins permeating it. The globules have never been discovered in the epidermic layers, but only in the deep-seated layers of the dermis, near the blind extremities of the hair follicles, also in these follicles and in the sudoriferous canals. 2. The metallic mercury rubbed in the skin or introduced into the intestinal canal, may give rise to injurious effects by passing into the current of the circulation. It is not easy to determine in what manner the metallic mercury, when once introduced into the circulation, becomes changed and modified, or how it then acts. At the side of the shining globules, M. Oesterlen found always a number of dull and dark colored corpuscles, which



resemble a good deal the granules of a mercurial oxide: these were found to be not acted upon by alkalis, but to be dissolved slowly in nitric acid after being ground down into a fine powder. In the urine and in the bile, the mercurial globules did not exhibit any appearance of decided change. 3. Minute globules of this metal, in the state of fine division, may traverse the capillaries without producing any inflammatory *stasis*: their presence in the vessels does not seem to influence the formation of the blood, or the development of the sanguineous corpuscles. 4. Small quantities of Mercury, taken inwardly or applied to the skin, appear to pass chiefly into the parenchymatous substance of the spleen, liver and kidneys, and to be discharged by the last two emunctories.”—(*Med. Chir. Rev.*, vol. 45, p. 500.)

But the most interesting mode of introduction into the system is by the skin and lungs, of the mercurial vapor which seems to be continually passing off from this metal even at the common temperatures of the air. This is obvious from the effects of Mercury upon the systems of the “*workmen employed in mercurial mines, gilders, silverers of looking-glasses, constructors of barometers, thermometers, &c.*” In corroboration of these effects Orfila gives a most interesting observation. “A man was in the habit of gilding from morning to night in a room sufficiently large, but low, where he slept, himself, his wife, and his children. Having taken but little precaution to guard against the effects of mercurial vapors, he was first visited with chancres on the mouth in very great numbers; his breath at this time became fetid; he could neither swallow nor speak without dreadful pains. Similar accidents, cured by cessation from his employments and appropriate medicines, appeared three or four times in succession, without any other symptoms; but in a short time this evil was accompanied with a very *violent trembling*, which first attacked the hands, and afterwards the whole body. Agitated by perpetual *convulsive movements*, he was neither able to speak nor to raise his hand to his mouth without striking himself. . . . At the expiration of a certain time there formed an abscess in which globules of Mercury were manifestly perceived.”—(Orfila. op. cit. 1st: p. 93.)

Orfila asks, after narrating this case, whether metallic mercury ought to be considered a poison? and answers it, very properly, as follows:—“It appears to me that metallic mercury acts as a poison, whenever it remains sufficiently long in the alimentary canal to undergo a considerable degree of division, or to be absorbed. It is well

known that moisture and grease are capable of attenuating exceedingly the molecules of Mercury to such a degree that they become black." He believes that in this state it may be absorbed, and its poisonous action developed, and cites the effects of mercurial ointment when rubbed upon the external surface of the body.—(Ibid., p. 97, 98.)

Among the peculiar effects of Mercury is certainly that of MERCURIAL TREMOR, of which the above is one case; and similar cases are by no means uncommon. A case of a man 34 years of age, who dealt in Mercury, was admitted into La Charite Hospital in May, 1834, with the exact symptoms above described. Dr. Christison mentions the case of a barometer maker and one of his workmen, who were accidentally exposed one night during sleep to the vapors of Mercury, from a pot on a heated stove, from which the latter was affected with salivation, which caused the loss of all his teeth, and the former with *shaking palsy*, which *lasted his whole life*. Dr. Darwin describes the case of a man 62 years of age, in whom the disease had existed for 25 years. Many of the symptoms of this disease assimilate it to the Chorea of young people, and the analogy to some of the symptoms of poisoning in dogs, by using antimony, as shown by the experiments of M. Millon, is most striking.—(Med. Chir. Rev. vol. 29th, p. 230.)

*Salivation* is an effect of Mercury which should be considered as peculiar; for although other remedies may excite it, yet none so surely as this. How it is brought about we do not certainly know, or whether it be a local or very general effect of the metal. It has commonly, I know, been supposed to show the general constitutional operation of Mercury. Some have supposed the action specific—others, who deny the existence of any specifics in Medicine, suppose that salivation is brought about by a general stimulant operation of the medicines, by which all the glands were alike excited to increased action, and that the bile from the liver is equally increased in quantity by it. From our views of the operation of a gland in the act of secretion, we cannot suppose that a simple increase in the mechanical actions of dilatation and contraction, would be sufficient to explain an increase in the bile.

Salivation is produced with much more difficulty in some constitutions than in others, and it seems indeed impossible to produce it at all in very young children. When pushed to such an extent as to produce it in them, it is sometimes attended with the most disastrous

consequences. Instead of causing salivation, and passing out of the system in that way, it seems to get into the bones, and causes the most *fearful caries and sloughing of the bones of the cheeks, alveolar processes, cheeks and gums*. Cases of this kind have been narrated to me by medical men, and others, as having occurred in this county, when the Mercurial Practice was most in vogue, in the treatment of our autumnal fevers.

It was at one time a prejudice among medical men, that the use of cold water, while under the influence of Mercury, would bring on salivation and other evil consequences, and I have heard of children dying in our autumnal fevers who were never allowed a drop, and whose last intelligible cry was water! water! I have no doubt that exposure to cold and moisture, which checks suddenly the transpiration of the skin, might prove injurious while using Mercury, but I know that there is no danger from the simple drinking of cold water.

We beg leave to give here a few remarks of Dr. Beck, upon the *Effects of Mercury in the Young Subject*. "If," says he, "salivation occurs so rarely in children under a certain age, then it is evident that it can never be made a criterion by which to judge of its influence on their system. To attempt, therefore to produce this effect, as we do in adults, is manifestly improper. . . . The fact that Mercury may prostrate and destroy a child, even though it does not cause salivation, it is to be feared is not sufficiently appreciated at least by some. We have known Calomel given without weight or measure to a young child, and the reason assigned to justify was that it could do no harm because it *would not salivate*. Now it appears to me that no opinion can be more unfounded, and no practice more mischievous. . . . The use of Mercury in young subjects, as an alterative, should in all cases be conducted with great caution. There is no practice more common than that of continuing the use of this agent in small doses for a considerable time, and certainly none which is more liable to abuse. Under the idea that the dose is so small, and from no salivation appearing, we are apt to infer that even if the medicine is not doing any good it is certainly not doing any harm. . . . Every practitioner must have been aware of cases, in which, in this way the article has been unnecessarily and injuriously continued. In bowel complaints, under the idea of altering the secretions, it has frequently, no doubt, helped to keep up the very intestinal irritation which it was given to correct. In other cases it has developed the latent tendency to other diseases,



---

such as *Scrofula*, *Phthisis Pulmonalis*, &c. In adults we know this to be very often the case. In the use of Mercury in young children great care should be exercised in ascertaining as far as possible their constitutional peculiarities. Whenever the patients show indications of *Scrofula*, or where there is an hereditary predisposition to Consumption, great caution ought to be exercised in the use of Mercury in their offspring. Mercury should be administered with great caution in cases where a child has been sick for a considerable length of time, and when the strength of the child has been very much reduced. In this state of constitutional depression a single cathartic dose of Calomel sometimes proves fatal. The too common practice of giving Calomel as an ordinary purge on all occasions is certainly unjustifiable. From the facility with which it may be given, it is unquestionably resorted to in a great number of cases where it is certainly unnecessary, and in a great number where it positively does harm. Now in this way there can be no question that the use of it has laid the foundation for the ruin of the constitutions of thousands."—(*American Jour. Med. Sci.*, No. 26, n. s., p. 509.)

Salivation has been very commonly supposed to effect a complete revolution in the system, and this opinion has been distinctly advanced by Dr. Warren. He says, "a necessary consequence of the highly stimulating power of mercurial oxides upon the system is *the universal revolution* which the constitution must undergo whilst subjected to their influence," and he goes on at some length to explain the reason of this necessary change. The grand principle upon which it is effected seems to be the breaking up of all old morbid associations, by the substitution of a new and more powerful action, brought about by the Mercury. Intimately connected with this general revolution in the system, is the notion of the *alterative action* of Mercury, when given in small doses for a long time, even without producing salivation. It must be admitted that, at best, these opinions are hypothetical, and appear to me to indicate clearly a sort of blind credulity in an *occult operation* of the remedy which is totally inexplicable and peculiar to it. I have never been able to discover any greater alterative or revolutionary action from Mercury in the cure of diseases, than from any other remedy. Every remedy must be supposed to alter, more or less, the actions of the system, whenever it effects the cure of any disease.

In the same way that Mercury excites the salivary glands has it been supposed to excite the liver, and consequently, in most diseases

of this organ, it has been held up as the chief remedy. From my own observation, I must say, that I have not been able to discover any particular difference in their action on the liver, between Mercury and any other active cathartic, and consequently do not believe that its action on this organ is either peculiar or specific. I have seen as much bile pass off under the use of milder cathartics, and more under the use of Tartar Emetic, than that of any other remedy I have ever used; and were I to judge from my own experience alone, I would not hesitate to declare that this preparation of antimony acted generally more decidedly upon the liver than any preparation of Mercury I have ever used.

Among the toxicological effects of Mercury may be mentioned a peculiar fever, which has received the name of *Hydrargyria*, a form of Neuralgia or Chronic Rheumatism known as *Mercurial Rheumatism*, in which the metal is deposited in the fibrous tissues and *cartilages of the joints*—various eruptions upon the surface of the body in the form of Eczema, Herpes, Meliaria, &c. The *Mercurial Tremor* we have already mentioned and this sometimes passes into a state of complete Paralysis.—(Med. Chir. Rev., vol. 38, p. 510.)

But among the worst effects of Mercury is a kind of Erysipelas or Erythema, which is known as *Mercurial Erythismus*. I am inclined to believe that this is nothing more nor less than the Hydrargyria or Mercurial fever, attended with erysipelatous symptoms, which, according to its severity, may be simple or phlegmonous, and I will terminate what I have to say upon the effects of Mercury by narrating the following cases of this affection, in which is shown at the same time a most unaccountable susceptibility to the action of this poison. The following are my notes of the cases, taken down from the mouth of the individual in August, 1838.

Mrs. R——, a respectable lady of this county, aet. about 50 years, presents a curious example of idiosyncrasy of constitution, in regard to the action of Mercury. The following instances can hardly be regarded as accidental coincidences, but must be looked upon as effects produced from bare contact with this *poison*.

A. The first time she ever had Erysipelas was after taking a dose of Calomel, which had been prescribed by a physician. The Calomel was taken at night; and the next day, "*from her head all over her body she was as red as scarlet.*"

B. The next time, a vial containing Calomel was broken. She emptied the Calomel into a plate, and, in order to free it from pieces

of glass, she sifted it through cloth. The next day her neck was covered over with splotches of Erysipelas.

C. She once made use of a solution of *Corrosive Sublimate*, for the purpose of destroying bed-bugs, (*Cimex lectularius*,) and of course her hands were more or less wet by it. In a short time, after this, she had the same erysipelalous eruption.

D. After weighing off some Calomel one day she got some on her hands—the next day she was affected with the Erysipelas.

E. The last time that she had been affected in this way, was in consequence of being in a close room with an individual (a lady) who was salivated. While in the room she was taken with a *Chill* and *Nausea*. She returned home, went to bed immediately, and spent a restless night—on the next day she was covered with Erysipelas, which was so violent as to confine her to bed for three months. It assumed the phlegmonous character. The inflammation terminated in abscesses over the glutei muscles, and sinuses were formed which were healed with difficulty. She, however, eventually recovered, and is now enjoying good health.

---

ARTICLE XXXVII.

*Case of Traumatic Tetanus cured by Strychnine.* By P. M. KOLLOCK, M. D., of Savannah.

Juba, a negro girl, belonging to J. B. B., of Savannah, while running about without shoes, stepped upon a piece of board which happened to contain a nail, and received a punctured wound of the sole of the foot—the nail entering near the heel, and penetrating to a considerable depth. Disregarding the accident, she continued to go about for three days, when she began to feel pain—which induced her master to scarify the part slightly and apply a poultice. This treatment failing to relieve the pain, which continued to increase with rapidity; on the 4th of July last I was called in to her. I found her in great agony, and immediately incised the part freely and deeply, inserting lint moistened with spts. terebinth, over which a laudanum poultice was applied, and a teaspoonful of laudanum administered by the mouth. In about an hour from this time I was summoned to her, and found that Tetanus had commenced. The paroxysms of spasm came on at intervals of two or three minutes and lasted two and a half or three minutes.



During the paroxysm (which was generally ushered in by a slight tremor of the eye-lids and the discharge of tears from the inner canthus of the left eye) the head and body were bent backwards and a little to the right side—the hands were clenched—the upper and lower extremities somewhat rigid, and the jaws firmly closed. Respiration extremely slow, and at times almost imperceptible—intelligence extinct.

R. Calomel gr. x. Tr. Opii ʒj., every two hours—tobacco poultices to spine and abdomen. After continuing these poultices for some time, they were removed, and a blister was applied, extending the whole length of the spinal column.

This treatment was continued without any abatement of the paroxysms in force, or any extension of the intervals between them, for the space of six hours—when a tobacco enema (two leaves of tobacco steeped in half-a-pint of boiling water,) was administered. This was followed by vomiting, great distress, clammy sweat, great prostration, insensibility, and stertorous breathing.

In a short time these symptoms became less intense—produced a perfect subsidence of spasm—but the insensibility and stertor continued.

R. Ol. Ricini ʒj.; blisters to calves of legs; cold applications to head; enema of sol. mur. sod. Discontinued calomel and laudanum.

She remained in this state about three hours, when the spasms returned with increased violence.

July 5, 8 o'clock, A. M. The treatment was resumed. R. Cal. and Tr. Op., as before. In a short time after the administration of the first dose, the tobacco enema (made rather weaker) was repeated.

Up to this time, she had taken 50 grs. cal. and ʒvj. tr. opii.

12 o'clock, M. Spasms continue; but rather diminished in force and frequency. R. Repeat tobacco enema; continue calomel and laudanum. Diet, gruel and rum, rich soup.

Half-past 5 o'clock, P. M. Very much the same.

Finding that the treatment had not advanced the case beyond a point of very slight improvement, believing that it had received a very fair trial, and forming an extremely unfavorable prognosis of the case, I determined to resort to a different remedy, viz., Strychnine, and accordingly, made the following prescription:

R. Strychnin. gr. j. Pulv. G. Arab. gr. xiv. M. Divid. in pulv. No. xiv., one powder every two hours. Discontinue all other remedies.

10 o'clock, P. M. The Strychnine has produced no alteration in her condition—a very severe paroxysm occurred while I was with her, which lasted twenty-two minutes. Continue the treatment, unless the peculiar effects of the remedy are manifested by a twitching or jerking of the extremities, or there is a cessation of the paroxysms of spasm.

July 6, half-past 8 o'clock, A. M. She has had no severe paroxysm for several hours; has taken gr. ss. Strychnine, which has produced little or no twitching. A short paroxysm occurred during my visit.

I dressed the wound in the foot, inserting lint moistened with spts. terebinth.

12, M. Has had no spasm since last visit.

I had directed the medicine to be given every hour until twitching or jerking of the extremities should be produced; but through some mistake, this was not done, and only one dose had been given since last visit.

R. Strychnine gr.  $\frac{1}{12}$  every two hours.

11 o'clock, P. M. Juba has had no spasm for five hours; she has taken  $\frac{5}{12}$  gr. of strychnine since two o'clock. She is very much disposed to sleep, which sleep seems natural, and she is easily aroused.

R. Continue the medicine every two hours.

July 7, half-past 8 o'clock, A. M. Juba has passed a quiet night; no spasm for fourteen hours; is entirely sensible; says that she feels better. Has had a free operation from the bowels. Has taken  $\frac{9}{12}$  gr. strychn. since 2 o'clock yesterday.

R. Continue treatment.

July 8, 9 o'clock, A. M. Juba has passed a quiet night—is very much disposed to sleep. Can this be the narcotic effect of the laudanum? She has taken none since the 5th. She has had no spasm for thirty-four or thirty-five hours. The bowels have been freely acted upon through the night. She has taken the medicine every three hours. She is salivated. The medicine has produced very slight twitching.

R. Continue Strychnine gr.  $\frac{1}{12}$  every four hours.

9th. Juba has continued free from spasm.

R. Strychn. four times during twenty-four hours.

10th. Same. Continue the medicine three times a day for three or four days.

12th. Has had no spasm for six days. The medicine has produced no twitching.

R. Discontinue the medicine after to-day.

July 19th. I visited the patient to-day, and found her sitting up, sewing ; complained of no pain nor any uneasiness whatever. The wound of the foot has healed entirely, and there is no tenderness in any part of the foot.

At 3 o'clock, P. M., of this day, I received a message, stating that she had a return of her spasms. On visiting her, I found her in a pretty strong tetanic paroxysm—which was said to have supervened soon after drinking freely of iced water—having complained first of pain at the praecordia, and vomited.

I immediately resumed the Strychnia gr.  $\frac{1}{12}$  every two hours ; the first two doses to be given at the interval of one hour.

I called to see her at half-past 7 o'clock, P. M., at which time she had taken three doses. She had no return of spasm after the first dose.

R. Continue the medicine every two hours.

July 22. There has been no return of spasm.

R. Continue the medicine three times a day for a few days.

August 18th. I have heard of no return of the disease up to this date, and presume that she may be considered cured.

It was suggested to me by a medical friend, who had failed to cure a case of traumatic Tetanus with strychnine, and who feels more confidence in calomel and opium, that it was probably the combination of the three which proved efficacious in this case ; and I was obliged to admit the possibility ; but the occurrence of the relapse, and its very speedy termination under the use of strychnine alone, without the intervention of a single grain of calomel or opium, will doubtless warrant us in the belief that the cure in this case, at least, is due to strychnine. I am not prepared to assert that the like fortunate result will occur in every case of tetanus, or even in the majority of them, treated with this alkaloid ; but I am disposed to speak favorably of it—and as it is pretty well ascertained, that the failures, in such as are treated with other remedies, so vastly outnumber the cures, that the former have become the rule, and the latter the exception ; it would be well to resort to it more frequently.

I have employed the remedy without success, in one or two cases of trismus nascentium. They were pretty well advanced before I was permitted to see them. As this is a disease very closely resembling tetanus in many respects, it might be well to make farther trials with the remedy.

In regard to trismus, I may be allowed to remark, *en passant*, that



I believe the most fertile cause of the disease to be, the manner in which the navel is treated after the separation of the umbilical cord.

The practice of midwifery in this neighborhood, and I believe, at the South, generally, is almost entirely in the hands of females—those most usually negroes—and where, in some rare cases, a physician is called upon to officiate, the treatment of the navel is left entirely to the nurse—by whom, as soon as the cord separates, a piece of “scorched rag,” or some other irritating substance is applied; and in the majority of cases this is the only attention which the navel receives. Of course, a very considerable collection of foul matter must occur at this part, a powerful cause of irritation to the very sensitive nervous system of a new-born infant.

It has always been my custom to enquire, particularly, into the condition of the navel—to make repeated ocular examinations, and to prescribe the mode of dressing, myself, notwithstanding the occasional broad, and not to be misunderstood hints, on the part of the *sage femmes*, that I was meddling with what was no business of mine; and that they did not thank me for my officiousness. The dressing which I direct for the navel, after the separation of the cord, is simple cerate; and I cannot recollect a single instance of trismus, occurring in a child which has been delivered by me.

In confirmation of the opinion which I have expressed, in regard to the importance of employing a suitable dressing for the navel, I will relate the following incident.

The negro midwife of a neighboring plantation, was instructed by myself; and among the directions which I gave her, was that of dressing the navel with simple cerate (after the separation of the cord) twice a day, sponging off each time, the purulent discharge with warm water, and applying over the dressing a good compress and bandage. For some time after she commenced practice she was sufficiently successful; but after a time trismus made its appearance, and every child which was born, died with it in 8 or 10 days after birth, I was generally sent for, and arrived in time, either to find the infant dead, or in *articulo mortis*.

After this had occurred rather too often, to be considered the result of unavoidable accident, I instituted an investigation into the conduct of the midwife during her attendance, and enquired particularly, in regard to her manner of treating the navel; and I was informed that she had been, *latterly*, in the habit of dressing it with “burnt rag!” She was severely reprimanded, for this departure from the

instructions which she had received from me, and threatened with punishment, if they were not attended to in future cases. It is now two years since this occurrence—the usual number of births have occurred on the place, and there has not been an instance of trismus.

This may be called a coincidence; and I may be reminded, that "*post hoc, ergo propter hoc*," is not always a good rule. But I am disposed to think, that the majority of medical opinions are not based on any better evidence.

---

ARTICLE XXXVIII.

*Treatment of Hooping-Cough with the Iodide of Potassium.* By H. F. CAMPBELL, M. D., Demonstrator of Anatomy in the Medical College of Georgia.

Iodide of Potassium, at the present day, may be said, with some degree of qualification, to be used in some form of almost every disease. Its great efficacy in the multitude of Syphilitic disorders is indisputable, and since the memoirs of M. Lugol, its applicability in the treatment of the vast number of diseases arising from a certain state of constitution termed the Scrofulous Diathesis, is fully established. Many forms of Neuralgia also, not due either to a syphilitic or scrofulous origin, yield readily to its use,\* and of late its success in the treatment of Spasmodic Asthma has been indeed cheering to those afflicted with this truly distressing malady.

The close pathological affinity between Spasmodic Asthma and Hooping-cough, and the success of the remedy in the former disease, induced me, during the prevalence of the latter in our city, to use Hydriodate of Potash in a very violent and obstinate case that came under my treatment.

CASE.—Mr. N. G., a gentleman of nervous temperament, aged about 30 years, had had hooping-cough for about six weeks previous to my seeing him, and had been fully treated after the ordinary plan of emetics, nauseants, demulcents, antacids, sedatives, &c., with but little temporary and no permanent benefit whatever. His condition was then one of extreme suffering; he had frequent and violent at-

---

\* The control of Hydriodate of Potash over the nervous system, in disease, is amply attested by Drs. Elliotson, Bardsley, Hudson, and many others. Vide. also, article by Dr. Bennett, in the London Lancet, and one by Prof. J. K. Mitchell, in the Medical Examiner.

tacks of spasmodic coughing, which, as is characteristic of the disease, would end in complete exhaustion of air from the lungs, leaving the patient much fatigued and almost powerless; but superadded to these ordinary symptoms there was an unusual irritability of the mucous membrane of the fauces, pharynx and larynx, which indeed was the most distressing item in his ailments. This irritability was so great, that in swallowing or speaking, and even in ordinary respiration, unless these acts were performed with some degree of care, he would experience an attack of suffocation, amounting almost for the time to complete asphyxia. His attacks of coughing were frequent and violent, often terminating as above described in spasmodic closure of the glottis.

*Treatment.*—On first seeing the patient the following prescription was made:—*R.* Extract: Belladonna, - - - grs. viii.  
Syrup: Scillæ, comp., - - - ʒij.  
Mix, and add of Acid Hydrocyanic, - gtt. 16.

Of this take one drachm, three times daily.

This prescription produced little or no mitigation in the symptoms, and was finally discontinued on account of the unpleasant effects of the belladonna, viz., vertigo, blindness, efflorescence, &c. The above symptoms being still as decided as ever, the following emulsion was given:—*R.* Potassii Iodidi, - - - grs. 80

Gummi Acaciæ, - - -  
Sacch. Alb. aa - - - ʒij.  
Water, - - - ʒij.

Mix, and take one drachm (equal to 5 grs.), three times daily.

In a short time all the symptoms had considerably amended, and at the expiration of ten days the patient was so much better that he thought he could omit taking medicine; but experience proved the contrary—he was obliged to resume it again, and continued about two weeks longer, (though not so frequently or in such large doses as before,) at the end of which time he was entirely relieved of the cough, and also of the spasmodic contraction in the muscles of the glottis.

*REMARKS.*—From the works of Dr. Marshall Hall, and others, we may infer as the pathology of hooping-cough, a highly excitable condition of a portion (the superior laryngeal) of the pneumogastric nerve, together with an inflammation of the mucous membrane of the larynx, pharynx, &c. It is also known, that in this disease the secretions of the stomach and bowels become much vitiated and



irritating, (almost invariably *acid*); and also, that these secretions, after their formation, serve very much to protract the disease, by the irritation they produce in the excitor nerves (filaments of the pneumogastric) of the stomach, being conveyed by the reflex function of these nerves to those supplying the mucous membrane of the respiratory apparatus; hence, in these cases we generally have a paroxysm of vomiting simultaneous with that of coughing—because on such occasions, the latter act is produced by a common cause which is adequate to excite equally, coughing and vomiting. The cough may at other times be excited by external causes applied to the mucous membrane of the larynx, or perhaps by an accumulation of excitement in the nerves that supply it. Further: these deranged secretions, which are most probably the *result* of disordered innervation in the secretory filaments of the sympathetic which supply the mucous membrane, by the irritation they produce in the excitor branches of the pneumogastric ramifying in this same membrane, become in turn a *cause* of the continuance of the disease.

Now for many years the bases of the most successful plans in the treatment of hooping-cough have been emetics and alkalies,—the first giving temporary relief by the removal of the disordered secretions, and the second by neutralizing them in the stomach, prevented the further derangement of this organ by their irritation. More recently, the oxide and nitrate of silver have been found beneficial, the efficiency of which, reasoning from their application in other diseases, (epilepsy, for example,) depends upon their tonic effect on the nervous system.

Considering the above pathology of hooping-cough as correct, in connection with its heretofore therapeutics, the curative action of the iodide of potassium is readily comprehended—viz: it fulfils, in some degree, the indication of an *antacid*,\* and above all, as is well established, it is an excellent alterative tonic to the nervous system.

In conclusion it may be said, that though rationally, we would consider the iodide of potassium a very useful remedy in hooping-cough; still, no doubt, there are many cases wherein, from constitutional peculiarity or other causes, it would be not only nugatory, but wholly inadmissible,† and while these observations on its use have

\* That is, when there is free acid in the stomach, sufficient to displace the hydriodic acid. The effect of this agent upon the absorbent and secretory apparatus has not been here dwelt upon, as it is sufficiently apparent not to require remark.

† As is known to be the case in its application to some cases of syphilitic disease.

been somewhat extended, the object has been more to instigate further trial of the remedy during the present prevalence of whooping-cough in our vicinity, than to claim for it anything like *infallible* efficacy in the disease.

---

ARTICLE XXXIX.

*Poisonous Properties of Sulphate of Quinine.* By E. M. PENDLETON, M. D., of Sparta, Ga.

In the August No. of the Southern Medical and Surgical Journal, in the Review of the American Journal of the Medical Sciences, is the notice of a case of Poisoning by the Sulph. of Quinine, from the pen of Dr. Baldwin, of Montgomery, Ala. This case, though somewhat unique, reminded me so forcibly of a singular one in my own practice, that I have been induced to lay it before the medical world, as confirmatory of a very important and dangerous property, existing in a medicine, more extensively used perhaps than any other in the Southern latitudes.

On the 17th of October last, I was called to visit the child of Mr. J. D. S., *sub nocte*, several miles in the country. I found my patient (a lad about four years old) laboring under a severe fever, which had supervened upon a slight chill. The usual alterative and antiphlogistic treatment, for autumnal fevers, was instituted on the 20th, which was his best day: I found him measurably clear of fever, and left a few powders of quinine for him to take the next morning, to prevent, if possible, the exacerbation of fever. I forget the size of the powders, but do not suppose there was over a grain in each, to be taken every hour.

On the 21st, about noon, I was sent for in great haste, with the message that my patient was much worse. I found him in about the following condition:—His pulse remarkably slow, with a full heavy beat; his tongue perfectly clean and natural; his breathing, if I remember right, rather labored. He was not remarkably restless, but lay in a dull comatose state, except when aroused, and then he evinced no disposition to talk or notice anything. The pupils of his eyes were dilated, beyond any thing I have ever seen. In fact this was the first symptom that alarmed the parents, so striking was it to every one that saw him. I doubt not that he was totally blind, but could not ascertain, owing to the age of the child, and his indisposition to notice any thing. If I remember aright he was deaf also.

I learned that he was entirely free from fever during the night and early in the morning, and seemed quite lively and much better. But after he had taken the second or third powder, (I forget which,) these alarming symptoms began to come on, when they stopped the medicine. I was forced to attribute the symptoms to the quinine, as he had taken nothing else, though I had never seen such an effect produced by it before, yet I could conceive how it might be done in certain constitutions, especially of children. An experienced physician, to whom I communicated fears, referred it to worms, which I doubted at the time, and now feel confirmed in my diagnosis, from the case recorded by Dr. Baldwin.

I instituted no treatment whatever, only cold applications to the head, of which he complained very much, (if I mistake not,) with the suggestion that he take pink-root tea freely, after the unpleasant symptoms had subsided. They remained, I think, about two hours, when the pupils began gradually to assume a natural appearance, and all the other symptoms to give way. I found him quite convalescent the next morning, free from fever and cheerful. The spigelia was given freely, but no worms were brought, which served still farther to confirm me in the belief that the unpleasant effects in this case, were superinduced by an over-dose of the sulphate of quinine.

---

## PART II.—REVIEWS AND EXTRACTS.

### *Preparation, Physiological Action of Ether, &c.*—(Half-Yearly Abstract of the Medical Sciences.)

*Nature and Mode of Preparing the Agent.*—The agent by which insensibility to pain has been achieved is rectified sulphuric ether; other ethers have also been used, as the chloric and acetic; the former is said to be equally potent, and less disagreeable. We have personally tried perfectly pure nitrous ether, but we found it to produce a painful oppression of the chest, with incessant coughing which remained for an hour or two, but subsided after a few inhalations of the pure sulphuric ether. In order to produce satisfactory results, it is necessary that the ether should be *perfectly pure*; the sulphuric ether of commerce, which contains sulphuric acid, alcohol, or the acetic or formic acids, is quite unsuited for the purpose. The mode of preparing pure ether is thus laid down by Dr. Jackson. "The basis of all the ethers is an hypothetical radical called ethule, which is represented by the formula  $C_4, H_5$ , and symbol Ac. Pure sulphuric ether is regarded as an oxide of ethule, and is represented by the formula



$C_4H_{10}O$ ; its symbol is  $AeO$ . It is prepared by decomposing highly rectified alcohol by means of sulphuric acid. Five parts of alcohol of 90 per cent. are mixed with nine parts of oil of vitriol in a vessel of copper or iron, placed in cold water. The action of sulphuric acid on alcohol is catalytic; bisulphate of the oxide of ethyle is formed, which, by elevation of the temperature and brisk ebullition, is decomposed, and the oxide of ethyle passes over in vapours, the sulphuric acid remaining with a portion of undecomposed alcohol, the water which passes over the vapours no longer uniting with the ether. The distilled liquid is next to be treated with an alcoholic solution of potash to neutralize the acids, and to render it slightly alkaline. It should then be redistilled in a water-bath, and the operation should be arrested as soon as the ether has attained a specific gravity of 0.72 at  $80^{\circ} F$ . The specific gravity may be still further reduced by allowing it to stand for some days, over dry chloride of calcium, and then redistilling it in contact with that substance. Ether thus prepared should not change the colour of litmus paper.”\*

*Mode of Exhibiting the Ether; Precautions.*—However trifling the amount of injury has been in proportion to the frequency with which ether inhalation has been practised, there cannot be a question that an agent capable of inducing such remarkable and potent effects ought not to be regarded as a “scientific toy,” or even to be employed at all by persons unacquainted with the principles of physiology and pathology. The precautions which we are disposed to consider requisite are as follows:

1st. Never to exhibit the ether vapour without having previously auscultated the heart and lungs.

2nd. Never to employ it in persons who have signs of obstructive disease of the heart to any amount, or of dilatation of its cavities, or whose heart is feeble even though not disproportioned.

3rd. Never to employ it in persons who have any considerable portion of a lung unfitted for respiration, as from hepatization, tubercular deposit, pleural effusion, &c.

4th. In persons with short necks, with tendency to cerebral congestion, its employment is not without risk; also, (perhaps) in those with disposition to insanity, or other recurrent disease of cerebral origin.

5th. No operation of consequence should be performed under the influence of ether without a preliminary “trial” exhibition.

*Rules for exhibition.*—Directions as to the method of exhibiting the ethereal vapour have been given by Mr. Robinson,\* who was one of the earliest experimenters in this country, by Mr. Braid, M. Burquieres,† and others; these are, however, all in effect nearly the same, and may be thus briefly stated.

1st. The ether employed should be the purest washed sulphuric ether.

2d. The patient should be allowed to respire atmospheric air alone

\* *Lancet*, Feb. 13.

*Med. Times*, May 15.

for a few moments if the apparatus is so formed as to allow of it, if not the nose should not be closed until several respirations have been taken, and the patient continues to breathe without trepidation.

3d. The ether should not be turned on in a full jet at once, but the stopcock should be so regulated as gradually to accustom the bronchial tubes to the vapour.

At this time coughing is apt to ensue, especially if the ether be not perfectly pure; this symptom, however, soon subsides, or can be moderated by a regulation of the jet of the ether.

4th. Surgeons differ in opinion as to the exact point at which inhalation should be suspended; we believe that for surgical purposes, Mr. Robinson's test as afforded by the state of the eye, will be a sufficiently good guide.

5th. In prolonged operations, it is necessary to alternate respiration of pure atmospheric air with that of ether vapour; this is accomplished by removing the clip from the nose, or still better, in those instruments which are so made, by shutting off the ether and turning on the air.

*Oxygen, &c. an Antidote.*—Under the impression that the specific effects of ether vapour upon the system are due to its power of producing a state analogous to asphyxia, it has been suggested by Dr. Jackson, and subsequently by Mr. Robinson, that oxygen gas should be kept ready to be inhaled in case of the occurrence of formidable symptoms. Mr. Hooper, acting upon the suggestion, has supplied his inhaler with the means of furnishing oxygen at pleasure.

On the other hand, Dr. Gull concludes, from a series of experiments on the lower animals, that oxygen has no antidotal power, that in fact if an animal be etherized and then made to inspire oxygen, it does not recover more speedily than if it respired atmospheric air alone.\* Nearly the same opinion is expressed also by Dr. Snow.†

We believe that the best treatment for *hyperetherization*, if we may be allowed to coin the word for the occasion, would be the administration of diffusible stimulus, friction over the region of the heart, dashing cold water on the chest so as to excite deep inspirations, and, in aggravated cases, blood-letting to a small amount.

*Administration of the Vapour of Ether by the Rectum.*—M. Pirogoff has stated that all the narcotic effects of ether may be as readily produced by causing the vapour to pass into the rectum, as by inhalation, and he believes that this latter mode of exhibiting it will speedily be superseded. His proceeding is first to empty the rectum by a common enema, and then to introduce an elastic pipe, which is connected with some receptacle, as a syringe, which is half filled with ether. This reservoir is then covered with a towel wet with warm water, and evaporation speedily commences, and the vapour mixed with air passes into the bowels. The professor states that the breath is impregnated with the odour of the ether in ten minutes, and that all the symptoms of narcotism are induced in five minutes. This

\* Med. Gazette, April 30, 1847.

† Lancet, May 29, 1847.

modification is undoubtedly worthy of trial, as by it all the objections heretofore brought against the ether inhalation on the score of asphyxia are completely done away with.\*

*General Effects.*—The effects of the inhalation of ether, as of the nitrous oxide, vary considerably in different individuals. In some, but we believe a comparatively insignificant number, great excitement is manifested at the commencement of the process; we have seen patients exhibit all the violence and even fury which is occasionally produced by the nitrous oxide; if, however, inhalation can be persisted in, this excitement speedily yields to a state of torpor and ultimate insensibility. The writer of an article on ether inhalation, in the "British and Foreign Med. Rev.," (April, 1847,) pronounces his belief that the excitement is frequently attributable to the too gradual administration of the vapour, and advises that in all cases it should be given in as full a jet as the bronchial tubes will tolerate. In by far the majority, however, no such excitement is manifested, the patient passing gradually into a state of profound insensibility.

By some experimenters, and more particularly those of the French school, the process of etherization is divided into three periods.

In the *first period*, the inhalation is accompanied by a sensation of stinging or heat in the bronchia, which excites coughing. This, however, speedily subsides, and the patient passes into the *second period*, in which any movements which the patient may have been making are replaced by perfect quiet. The respirations are short, and the expirations prolonged and forcible. The arms fall relaxed, and the eyelids begin to tremble in a manner very characteristic, and if the eye be uncovered, the pupil will be seen to oscillate, with a tendency to turn upwards and inwards. At this time perception of external objects fails, the head drops on one side, and the patient passes into the *third period*, or period of complete insensibility. The pupil is now completely turned up under the eyelid, and the patient takes no notice of pinching or other means of rousing his attention. This has been termed the *surgical period*, and is the moment usually chosen to commence an operation.

The first effect of ether upon the circulation is to accelerate it; the pulse subsequently falls, and in the third period loses power as well as frequency.

The physical effects of ether are remarkable, and, as in the case with the nitrous oxide, appear to be modified according to the age, habits, or propensities of the individual. Thus the little child dreams of its playthings; the sportsman is following the hounds or catching the imaginary salmon; the game-keeper we have known to dream of a conflict with poachers; the laborer that he is getting drunk in a pothouse of which he is a habitué. In females, especially those of a warm temperament, emotions have been manifested which are ill adapted for general inspection; in some it has been evident by their

\*Med. Gazette, May 28.



movements that they were under the influence of the fully-developed sensations of the venereal orgasm. These untoward displays are, however, we believe, very unfrequent; but it is well that the operator should be aware that their occurrence is not impossible.

A difference of opinion exists as to the conditions of the sensorium during etherization. Some maintain that the sensation of pain is not abolished, but that the recollection of it only is lost, and certainly this opinion is in some degree countenanced by the cries and contortions manifested by patients who have, when their sensibility has been restored, asserted their perfect ignorance of the operation performed upon them. But, on the other hand, it must be remembered that neither ejaculations nor struggling is a proof of sensation, as we witness both in the epileptic, whom no one, we presume, will maintain to be conscious during the paroxysm. This question is, however, after all, one of mere curiosity; whether the patient be utterly unconscious of the knife or only forgets its pang, the effect is the same upon his mind; he believes, at least, that he has not suffered, and the subsequent condition of his system in the majority of cases would lead to the conclusion that he has not.

*Time required to produce Insensibility.*—This varies mainly, we believe, according to the degree of skill with which the vapour is exhibited. We have seen it produced in two minutes, and only imperfectly induced at the expiration of twenty; in the latter instance we have generally observed some imperfection, either in the instrument or in the application of the mouth-piece. Insensibility is more rapidly produced in children and women than in men, and the period appears to be abridged by repetition of the inhalation.

*Period during which Insensibility remains.*—This also is subject to variation; the average duration may be stated to be from two to six minutes. Sometimes, and especially in those ill-managed cases in which the patient is more suffocated than etherized, he does not perfectly recover his consciousness for half an hour or more. The restoration is sometimes gradual, at others sudden, the patient instantly starting up as from a dream. He is for a moment or two somewhat incoherent and staggers about as if half drunk. No ill effects are left behind in the majority of cases; but in some, more or less headache remains for the rest of the day.

*Physiological Effects.*—No point in connection with the inhalation of ether has given rise to more discussion than that of its physiological action. Some regarding it as identical with asphyxia, others with intoxication, others again as different from either. We shall not attempt to reconcile these conflicting opinions, for the reason that we believe that our present acquaintance with the subject is not sufficiently advanced to enable us to do so; we shall content ourselves with the analysis of the principal communications which relate to the subject, leaving our readers to draw their own conclusions.

M. Longet has executed a very elaborate series of experiments upon dogs and rabbits, the results of which are given in a lengthened paper

published in the "Archives G n rales," Mars, 1847. These may be thus briefly recapitulated :

1st. There is complete momentary suspension of sensibility as well in all the parts of the cerebro-spinal axis which usually manifest sensation as in the nervous trunks themselves.

2d. The action of ether is more stupifying than that of alcohol, which latter merely deadens without abolishing the sensibility of the nervous centres.

3d. Ether abolishes momentarily but completely the reflex action of the spinal marrow and medulla oblongata.

4th. In animals this effect of ether on the spinal marrow may be in a measure controlled or prevented by strychnine.

5th. The cerebral functions are constantly suspended before those of the spinal marrow, and are re-established before them.

6th. Ether, in the living animal, enables us to isolate the seat of sensibility from that of the intelligence and of the will.

7th. The action of ether on the nervous centres may be so graduated as to produce two stages, which I demonstrate respectively—  
1, *the period of etherization of the cerebral lobes* ; 2, *period of etherization of the annular protuberance*.

8th. *The true surgical period* corresponds to the etherization of the cerebral protuberance.

9th. The death of animals from ether seems to be due to asphyxia.

10th. As soon as complete insensibility declares itself the arterial blood becomes of a dark colour.

11th. From experiments performed in conjunction with M. Blandin, it would appear, that the continuation of inhalation for eight minutes after complete insensibility has been induced will cause death.

M. Flourens has likewise experimentalized upon the effect of ether upon the nervous centres; and as respects the order of succession in the phenomena of insensibility agrees closely with M. Longet. By a more extended study of the effect of the agent upon the spinal marrow he decides that sensation is first abolished, and then motion; but that in some instances both functions are lost simultaneously.\*

In an essay on the physiological action of ether, read before the Glasgow Medical Society, Dr Buchanan expresses his belief that the vapour is absorbed by the lungs, and becoming mixed with the blood, operates directly upon the heart and brain. He explains the difference of action of the vapour inhaled and ether taken fluid into the stomach, upon the known immiscibility of ether with water, and the fact that when taken into the stomach it becomes after absorption so diluted by the various currents of blood which it meets with in its upward course to the heart, as to be rendered almost inert. When inhaled, on the contrary, it goes direct to the heart, mixed with the blood of the pulmonary veins only.†

A paper on the physiological action of ether, by Dr. Black, of

\* Encyclog. des Sciences M d.

† Med. Gazette, April, 1847.

Manchester, appears in the "Provincial Medical Journal,"\* in which its *modus operandi* is explained upon the theory that the vapour is made to permeate the air-cells in virtue of the increased tension produced by the temperature of the body. When it has gained access into the circulation, he conceives that this tension still continues, and "when the distending agent reaches the brain in the current of the circulation, the elastic force meets with a counter-pressure in the resisting case of the calvarium; its tension, therefore, becomes increased, and the consequence is that the cerebral mass suffers compression even to paralysis of some of its functions."

*Effects of Ether upon the Blood.*—Some direct experiments to elucidate the effect of ether inhalation upon the blood have been recorded by Mr. Pring;† but they merely tend to confirm what many, the writer among the number, have observed during operations, viz., that the arterial blood loses its florid colour. The fact, however, it must be stated, is denied by M. Leassaigne, who has given an analysis of blood before and after inhalation. He decides:

1st. That specimens of blood taken before and after inhalation [it should have been taken during the process] does not differ sensibly in colour or as to coagulation.

2d. The serum and clot offered the following difference:

|                  |   |        |   |   |        |
|------------------|---|--------|---|---|--------|
| Before inhaling, | } | Clot,  | - | - | 65·46  |
|                  |   | Serum, | - | - | 34·54  |
|                  |   |        |   |   | <hr/>  |
|                  |   |        |   |   | 100·00 |
| After ditto,     | } | Clot,  | - | - | 59·69  |
|                  |   | Serum, | - | - | 40·31  |
|                  |   |        |   |   | <hr/>  |
|                  |   |        |   |   | 100·00 |

3d. The clot appears less consistent before than after inhaling.

4th. The globules, fibrin and albumen are unaltered.‡

Our personal experience as regards the colour of the blood, is in accordance with that of Mr. Pring: the same fact is also distinctly confirmed in the experiments of M. Amussat.

### *Application of Ethereal Inhalation in Surgery.*

It is not our intention here to take any notice of the numerous instances of the successful applications of ether vapour in the art of dentistry, but to allude only to the more severe operations in which it has been employed. We may remark, however, *en passant*, that the general exhibition of so potent an agent by a class of men the majority of whom have no pretensions to physiological or pathological knowledge, without repeated accidents, is one of the strongest proofs of its comparative innocuity.

It is impossible to give anything like a correct statement of the

\* April 7, 1847.

† Lancet, May 1, 1847.

‡ Prov. Med. and Surg. Journal, May 5, 1847.



number of cases in which ether has been employed in surgery, for as soon as the first blush of novelty had passed away, practitioners ceased to record their operations. We have, however, notes of upwards of one hundred cases in which inhalation has been followed by the most perfect success as regards the abolition of pain, and the majority of which have been represented as progressing favourably at the time of their report. Of the ultimate result of many of these cases no mention has been subsequently made, and we are, therefore, bound to conclude either that they terminated successfully, or, at all events that death, when it did occur, was at a period so distant from the time of operation as to preclude the idea of its connection with the administration of ether. Among these operations are several of the most formidable character, such as lithotomy, amputation of the thigh, leg and arm, hernia, reduction of old dislocations, urethroplasty, &c., besides the minor but equally painful operations for removal of tumours, removal of venereal warts, phymosis, evulsion of nails, necrosis, castration, &c.; operations have also been successfully performed for cataract, entropium, squinting, and other affections of the eye.

M. Burguieres gives a table of 211 operations in the French hospitals, in which ether has been administered, and appends to it some remarks on the comparative mortality of the different classes of operations with and without ether, which are much in favour of its exhibition. For instance, in the case of amputations, he shows that the general mortality of cases operated upon in the ordinary way has been, between the periods of January, 1836, and January, 1841, 332 in 858, or 2 in 5 cases nearly. Of amputation performed with the aid of ether he records 45, of which 12 proved fatal, being an average of 1 in 4. Again, descending to particulars, M. Burguieres analyzes a series of amputations of the same kind, including the thigh, leg, and arm; in those performed with the ether the deaths have been 2 in 5; without it, in the period above alluded to, the mortality was 3 in 5.\*

We are not able to offer any definite account of the effect of ether inhalations upon the consecutive phenomena of operations, but it may be stated that in the few instances in which such effects have been recorded they are of a satisfactory character. Many surgeons have noticed that the depression of the system immediately succeeding capital operations has been much less than where the patient has not had the pain annihilated, that, in fact, the "shock" has been less; others have seen reason to believe that the reaction, the traumatic fever, is less than in ordinary cases. M. Jobert has, moreover, stated that the local inflammation has proved less, and that union by first intention has thus been prevented. This cannot be looked upon as in its favour.

On the other hand, it is but fair to state that it has been thought by some that abolition of contractility in the muscles is adverse to the formation of a good stump, and others have feared that consecu-

---

\* Med. Times. May 22, 1847.

tive hemorrhage is rendered more probable by the increased fluidity of the blood. We have not, however, met with any record of a case which justifies this apprehension.

*Application of Inhalation of Ether in Practical Medicine.*

The vapour of ether as yet has been used therapeutically in but a small number of diseases, and in comparatively few cases only of these; we shall therefore be able, without much sacrifice of space, to give a tolerably comprehensive account of its effects in this department of the profession.

*Tetanus.*—From the consideration of its prominent property of abolishing pain, the attention of medical men was naturally soon turned towards its exhibition in those diseases in which pain is a marked feature; and among these tetanus was suggested as a disease in which its powers were especially worthy of trial. An opportunity of making the experiment having offered itself in the writer's own practice within a very short time of the introduction of ether inhalation into this country, it was readily adopted as an experiment, but without any anticipation of benefit, as he was at that time of opinion that the effects of ether were not able to reach the spinal marrow. The result proved that as far as its effects upon the disease is concerned that opinion was correct, for, instead of alleviating the spasms, the act of inhaling most distinctly induced and aggravated the paroxysms.

The case, which is reported elsewhere,\* is as follows:—A man aged about 60, but of remarkably fine and athletic proportions, ran a nail through his boot into the sole of his foot, near the ball of the great toe, while walking across some old timber. The accident gave him no uneasiness until the expiration of a week, when he complained of stiffness in the neck, and placed himself under the care of Mr. Coe, a surgeon of Bury St., Edmunds. The next day the tetanic symptoms were general, and my co-operation in the treatment of the case was requested. On visiting the patient, about eleven in the morning I found the jaw completely locked, the spasms frightfully violent, and considerable opisthotonos; in fact, every symptom was present of tetanus of the most acute character. Our treatment was commenced with the *Cannabis Indica*, full doses of which were with difficulty got down; but this medicine was for a period omitted in favour of the ether inhalation, which we determined to essay. A common bladder and pipe being furnished, and two ounces of the purest ether we could obtain being put into it, the patient was got into a bath at 180°, and the inhalation commenced. The warm water had partially relaxed the board-like rigidity of the body, and the poor fellow expressed some relief, when the attempt to insert the pipe again excited a strong spasm. Being, however, anxious to persevere, he contrived to push it into his mouth; but the first breath he drew aggravated the spasms in a tenfold degree, the body became perfectly

\* *Prov. Med. and Surg. Journal*, April 21, 1817.

opisthotonic, foam issued from the mouth, and the man altogether presented so frightful a spectacle that we might fairly have been excused had we desisted from that moment. We, however, after allowing the effects to subside, made one more attempt, when the recurrence of the same symptoms convinced us of the worse than uselessness of the proceeding.

It is, however, in reference to this case, important to state that, as it happened before any more effectual apparatus had been devised, the ether was exhibited by means of a common bladder and pipe. Whether, with one of the inhalers now in use, the result would have been different, it is, of course, impossible to state.

The above is not the only case of tetanus recorded, in which the symptoms have been aggravated by ether inhalation; one has recently been mentioned by M. Roux, in which death was, in his opinion, evidently hastened by the remedy.

On the other hand, we have some cases of tetanus to relate, in which inhalation either relieved only, or, to all appearance, was the means of cure. Thus Dr. Brady relates the following case:

"A man, æt. 26, after a fall, by which he hurt his back, complained next day of a feeling of stiffness of his neck and throat, which gradually increased. After a restless night he awoke suddenly, complaining that his jaws were closing. This increased with rapidity, and on the following day he came under Dr. Brady's care, in a state of complete tetanus. The inhalation of ether was suggested and tried. When he had inhaled for about a minute and a half, his eyelids were observed to drop suddenly, and his face to assume an expression of repose; upon which the mouthpiece was withdrawn, and being asked how he felt, he said he was relieved. The mouthpiece was then re-applied, and he continued to inhale until he fell back in the bed with his muscles relaxed. He lay thus, apparently in a calm sleep, for about four minutes, during which he exhibited no feeling of pain when pinched. Upon waking the spasms returned, when it was deemed advisable to have recourse to more energetic treatment, and the inhalation was, without, as it appears to us, any sufficient reason, omitted. A few hours terminated the case."\*

Another case, in which ether relieved the paroxysms, is reported by Mr. Broughton. The patient was a man whose arm had been shattered by the falling of a stone, and for which amputation had been performed. The symptoms of tetanus came on some days after, and were at first treated with opium and belladonna, but without relief. Ether was then inhaled, and he was soon under its influence. All contraction and spasm ceased, and he slept for ten minutes. As soon as he became sensible the spasms returned, but not with such violence. He again inhaled with the same beneficial result. He took it a third time, and it again relieved him. A subsequent spasm instantly destroyed him.†

\* Dublin Med. Press.

† Prov. Med. Journ., May 5, 1847.



In the two succeeding cases the inhalation of ether in tetanus was followed by recovery.

The first case is extracted from the "*Clinique de Marseilles*," and is stated to have been under the care of M. Pertusco, surgeon to the Hospital of St. Maurice, at Turin. The disease was, we presume, of the idiopathic form, as no mention is made of any wound. The tetanic symptoms appeared on the 4th of February, and on the 13th had attained their greatest intensity, when the ether inhalation was adopted and repeated several times; the spasms became gradually less severe, until they ceased altogether.\*

We do not look upon the above instance to be one in which much confidence is to be placed, as the details are far from satisfactory. The second, which is reported in the "*Provincial Journal*," is better authenticated.

"Charles White, æt. 12, became the subject of a scalp wound, which gave rise to tetanic symptoms. The ether was exhibited by Mr. Hawkesworth, and its narcotic effects were speedily induced. In a few minutes the jaw fell, and the whole body assumed a relaxed and passive condition. He remained quiet for a short time, but in about an hour the spasm and rigidity returned, but not so violently as before. Recourse was had to the ether a second time with good effect; and during each successive application the patient became more relieved. His recovery was speedy, and no medicine, beyond an occasional aperient, was exhibited."†

*Insanity.*—Ether inhalation has not yet been tried to any extent in insanity. M. Cazenave, of Pau, and M. Jobert, being the only persons who, to our knowledge, have employed it. It was given by the former to a female patient, who had rested neither night nor day for five months, and was the means of inducing tranquility, without being followed by any injurious consequences.‡

M. Jobert also used it in a case of simple insanity, with the effect of inducing sleep, and restoring, temporarily, a state of rationality.§

*Neuralgia.*—Cases of the beneficial influence of this agent in neuralgic affections have been recorded by Mr. Morris, Mr. Semple, and one also by M. Henoré.

Mr. Morris's first case was one of neuralgia of the first pair, for which, in former attacks, all known remedies had been unsuccessfully tried. In using ether, Mr. Morris did not find it necessary to produce complete insensibility, but it had the effect of dissipating the pain almost instantaneously.

The next case was one of neuralgia of the testicle, in which the pain was removed with equal success, though, from some imperfection in the apparatus, the effects of the ether were not so rapidly induced ||

Mr. Semple's patient suffered from severe neuralgia of the head

\* *Revue Medico-Chirurg.*, Avril, 1847.

† *Prov. Med. Journal*, May 19, 1847.

‡ Reported in *Med. Gazette*, May, p. 878.

§ *Br. and For. Med. Rev.*, April, 1847.

|| *Medical Times*.

and face, to an aggravated degree, and had derived no benefit from any Medicine, internal or external, which she had taken. At the time of inhaling the pain was of a most excruciating character; but on her recovery from the ethereal narcotism it had lost its severity, and subsided into a dull but bearable feeling of pain. The acute pain did not return.\*

*Spasmodic Asthma.*—Dr. Willis† and Mr. Cantrell‡ have both mentioned their success with the vapour of ether, in the treatment of spasmodic asthma. The former writer further states that he had long been in the habit of using it previously to its recent introduction into practice.

*Hooping-cough.*—Dr. Willis also speaks favourably of its powers in this disease.

*Laryngismus Stridulus.*—An instance has recently occurred in the writers experience, in which benefit was derived in a very severe case of laryngeal spasm, by the use of a sponge saturated with ether. This case is reported by Mr. Image, of Bury St. Edmunds, with whom the case was seen by the writer in consultation.§

Inhalation has also been used successfully in *Colica Pictonum*, by M. Bouvier, and in *Dysmenorrhœa*.||

---

*The Nature and Treatment of Sea Sickness.* By F. WILLIS FISHER, M. D., Paris.—(Boston Med. and Surg. Journal.)

If we were to judge of a disease from the painful sensations that it causes, rather than from the danger it involves, we should be forced to class sea sickness in the rank of the scourges of humanity. This affection kills no one, but causes those affected by it to suffer severely. Many marine officers have been compelled to give up the life they had chosen, because the habit of navigation could not relieve them from the occurrence of nausea every time the sea became rough and agitated. Some persons have renounced revisiting their country and their families, sooner than expose themselves again to what they suffered from sea sickness on their first voyage. Every scholar knows that Cicero preferred giving his head to the assassins of the triumviri, rather than remain a few moments longer a prey to the pain of sea sickness on the vessel which bore him far from the shores occupied by his enemies. A morbid state, capable of imposing the sacrifice of all that man holds most dear, the sacrifice of ambition, that of the natural affections, and even of life, surely merits the attention of the physician. Upon the nature of sea sickness, and the rational means to employ with the view to avoid and combat it, nothing positive is as yet known; a proof of which lies in the diversity of

---

\* Lancet, March 27, 1847.

† Lancet, March 20.

‡ Prov. Med. and Surg. Journal, May 19.

§ Prov. Journal, June 2.

|| Brit. and For. Med. Review, April, 1847.

opinions on this subject. We do not think that the true theory of it has as yet been given.

Nearly all writers have considered the affection in a reverse sense of what is really the case :—for example, in attributing sea sickness to a sanguineous congestion of the brain ; or, assigning it a cause in fact incapable of producing it, in referring it to shocks or agitations that are communicated to the intestines by the motion of the vessel. To form an estimate of these two opinions, the experience and theory of M. Pellarin during his service as marine surgeon, seem deserving of attention, as approaching nearer to the true cause and theory of this disagreeable affection. The invasion of sea sickness, far from being accompanied by the ordinary symptoms of congestion, a flushed countenance, vascular turgescence, full pulse, sensation of heat and tension in the cranium, throbbing of the temporal arteries, the eye brilliant and injected, &c., is rather characterized by the opposite state—a paleness of the face and hands, a retreat of the blood from the surface, a depressed pulse, general hyposthemia, a dull, glassy eye when the affection is at its highest point. M. Pellarin has never observed any of the accidents of cerebral hyperemia in individuals affected by sea sickness. If during great efforts of vomiting the blood flows to the head for the moment and colors the face, it is only the instantaneous result of these efforts ; the paleness soon reappears, with all the other characters of the anæmic state, just as it happens when one is under the influence of tartar emetic, taken in such a dose as to produce vomiting.

Another consideration which ought still more to remove the idea of the sanguineous cerebral congestion, is that one suffers less when lying down, than when standing ; and less still, if, instead of remaining simply in a horizontal position, he has his head lower than the rest of the body.

As to the explanation which would make this affection to depend upon the shocks impressed upon the intestinal mass, this resists examination no better than the first. The trotting of a horse shakes the bowels much more than the pitching and rolling motion of a vessel, yet it never causes anything that resembles sea sickness. Sickness from riding in a carriage is of the same nature as the last ; it is like the disagreeable sensations caused to some persons by swinging. This sickness is sooner felt in a carriage suspended with springs, than in a hard jolting cart, which shakes the organs much more than an easy carriage. One may make upon himself the experiment of the mechanical shock impressed on the intestinal mass, by agitating the floating portion of the abdominal viscera in his hands, by giving them successive impulsions, either from below upwards, or in any other direction, and he can never cause by these manœuvres anything analogous to sea sickness. Compression, a kind of kneading of the stomach when distended by food, may sometimes cause the expulsion of a portion of its contents, but it does not resemble that strange uneasiness and profound prostration which characterize sea sickness.



The other explanations ordinarily given for sea sickness—such as the sanguineous congestion of the brain, the shaking of the abdominal viscera; that this affection has a cause altogether nervous, depending principally upon the nerves that excite the epigastric and abdominal viscera, &c., throw no light on the question.

M. Jobard, of Brussels, without doubt has reason in saying that the essential cause of sea sickness is purely mechanical. However, he goes too far when he adds that the odor of the vessels does not the least contribute to excite it. Although this state of uneasiness may be caused by the movements of the vessel, yet it is not less true, that whatever excites repugnance, the odor of the tarry materials, the emanations that come from the hold and other low parts of the vessel, the sight of persons vomiting, all these impressions second the nauseous influence of the mechanical cause of sea sickness, and tend to produce it, from sympathy. Moreover, the proofs that sea sickness depends essentially upon the motions of rolling and pitching, are so evident that it is not worth the trouble to cite them. The nausea arises under the influence of these movements, and is generally proportioned to their extent and quickness. It is felt less in the centre of the ship, near the foot of the mainmast, because the double motion is less there than at the edge, especially at the extremities where the pitching is most considerable. In a hammock or frame suspended so as to have as little friction as possible, which rests always in the direction of the perpendicular, and consequently not subject to the different inclinations of the vessel, one nearly escapes being sick. The production of vertigo and nausea which precedes the vomiting, may in part be imputed to the impressions resulting from the sight of objects which appear to rise and fall alternately in relation with the vessel. Regarding the horizon continually oscillating and moving, or the steerage of the vessel, or the water that seems to fly along its sides, is sometimes sufficient to determine the crisis of sea sickness. From this follows the opinion that it is especially by the eyes that sea sickness affects the economy. Nevertheless, as some have pretended, the visual impression is not the essential cause of the nausea, for it is equally experienced in obscurity of night, and by blind persons.

M. Pellarin has not remarked so striking a difference as M. Jobard, and many others, between the influences of rising and falling, and he affirms that when one is forward, the crisis of the nausea takes place at the moment this extremity rises. Whatsoever it may be, M. P. is disposed to admit what a marine officer recently told him. It is in the rising motion or ascension that the nausea commences, but it is in that of descending that the nausea is exasperated and acquires all its intensity. The following is the theory of M. Pellarin. Sea sickness ought to be attributed to the trouble caused in the circulation of the blood by the alternate movements of inclination that the ship undergoes; either lateral rolling; or antero-posterior, pitching. This trouble has for a result, not to congest the brain, as Wollaston

pretends, but, on the contrary, to deprive it of a sufficient quantity of blood for the normal stimulation of the nervous centre. That which is experienced in sea sickness is in fact analogous to what often happens in arresting the flow of blood in persons who are bled while sitting or standing, and who at the time they faint are taken with a disposition to vomit, and really do vomit. M. P. does not deny that by reason of the general diminution of the circulation there may be a stagnation of the venous blood in the cerebral sinuses, but it is especially in the want of a sufficient excitation of the nervous centres by the arterial blood that the primordial phenomenon of sea sickness seems to consist. Observe a person seized by sea sickness; his face becomes pale, his extremities cold, his nails turn blue as at the debut of intermittent fever. What he experiences resembles much the effects produced by the smoking of the pipe or the cigar, on persons who are not accustomed to smoke. The pulse becomes small, and there is an extreme prostration of the intellectual and physical faculties. There is a hypothermic influence in both cases, by the narcotic action of the tobacco in one case; by the diminution of the circulatory force of the blood in the other. What individuals best resist sea sickness? Very young children, those who are at the breast, in whom the heart is relatively more voluminous, and the circulation more active than in adults, are not sensibly incommoded by the affection. Without being wholly exempt, animals experience it less than men, because with them the brain is nearly in the same horizontal plane as the heart, and it is not rare to see the poultry in their first voyage, present nearly all the signs of this affection, almost to vomiting, when the sea is rough. Among the adult passengers, those who take the least exercise, and who go on deck in the breeze the least, remain the longest under the influence of sea sickness. And among persons equally habituated to sea life, those who by their functions or rank have the least corporeal activity, are more liable to return of nausea than the common sailor who works the vessel, who mounts the masts and yards, and is exposed to more tedious movements than those on deck. Dulness of spirits and lassitude, a cold drizzling rain that cools the skin, and diminishes the circulation, are predisposing causes. Towards the close of sea sickness, when the nausea and vomiting begin to leave some respite, one is inclined to somnolence, as after hemorrhages. Is it not by a sedation of the same kind that infants are quieted and put to sleep by rocking them? In fine, M. P. concludes that whatever raises the force and accelerates the rhythm of the circulation, prevents or diminishes the liability to this affection. Strong and frequent respirations act thus, according to the testimony of M. Arango, who warded off sea sickness until the fatigue of the respiratory muscles obliged him to renounce this prophylactic means. M. Jobard and many others have recommended a girdle which compresses the abdomen at the base of the chest. This in truth alleviates, but not because it confines the intestines, but because it contributes to push the blood towards the

brain. It acts in the same manner as a person lying down with the head low, a position that is sufficient to dissipate the nausea of persons affected by syncope, or that after blood-letting, which state presents a striking analogy to sea sickness. Moreover, a proof that compression of the chest and abdomen is not a sovereign remedy, is, that corsets do not prevent women from being affected by it. In these two comparative states (hypothymic nausea, after blood-letting, and marathime nausea), the impression of a sharp breeze is equally favorable, and the first symptoms have been sometimes overcome by going on deck, and receiving the direct action of a brisk current of air. To verify the theory of M. Pellarin, if those who are placed in circumstances that cause sea sickness should have large cuppings from the lower limbs, they would experience the first attacks sooner, as in this case there would be two concurring causes to deprive the brain of the normal afflux of blood that is ordinarily received. Another mode of verification that M. P. has not employed, is auscultation applied to the large vessels of the neck; we are inclined to think that the *bruit de soufflet* ought to be heard in individuals who are affected by sea sickness.

M. P. recognizes an analogy between the nausea produced by the motions of a vessel, and the nausea and vomiting of women during the first months of pregnancy; that is, at an epoch when the womb becomes the centre of a sanguineous afflux, and consequently diverts from the brain a portion of the vivifying liquid that it received. Many women have declared that nothing resembled more the nausea of the commencement of pregnancy than that they experienced the first few days at sea. Another circumstance which strengthens this theory is, that generally pregnant women are rarely taken with vomiting while they remain in bed, and, on the contrary, often so taken, when they change the horizontal to an upright position. Why are women more nervous? why have they odd tastes and irresistible desires, during the period of pregnancy? Is it not because the nervous system is at this time less supplied with blood, and that the blood, as every one knows, is the moderator of the nerves. A similar cause produces the greatest susceptibility among women during the menstrual period. To cite an example—a lady, who had never been sea sick during many voyages, experienced it severely in crossing the English Channel when she had one of her periodic evacuations.

To resume the conclusions. First the sickness produced by the sea, by riding in carriages, by swinging, are all phenomena of the same nature, determined essentially by the influence exercised on the circulatory march of the blood in the movements that the body undergoes under these different circumstances. Second, this influence has its principal effect in diminishing the ascending force of the excitory liquid in the aorta and the arteries branching from it; from this results a hyposthenic state of the brain by anemia or hypohemia. Third, the insufficient excitation of the cerebral organ determines, by sympathy, spasmodic contractions of the diaphragm, vomitings—



which have a particular tendency to reconvey the blood which is wanting towards the nervous centre. These efforts are a crisis which takes place in a conservative end. They manifest themselves not only in sea sickness, but in many other circumstances where the brain becomes suddenly deprived of its normal supply of blood; for example, in persons not affected by phlegmasia who are bled.

*Treatment.*—There are two orders of means to be employed. The first consists in removing one's self as much as possible from the cause, i. e., from the motions of the vessel, in remaining in a recumbent position, in a hammock suspended without sensible friction at its points of attachment. The second has for an end to combat the effects of the cause on the organism. It acts especially to this end in stimulating the circulatory function by all the agents susceptible of increasing its energy. Thus, a tonic regimen, active corporeal exercise for some days preceding embarkation. At sea, if the weather permits, one ought to keep on deck, in the breeze, make large inspirations, walk quickly and until he perspires or is fatigued; or, better still, to engage in some hard exercise, even with the sailors in working the vessel. Hard work, that which requires great muscular effort, is the surest prophylactic against sea sickness. The girdle has also its advantages in contributing to force the blood towards the head, and perhaps in seconding the contractile force of the heart. Before the manifestation of the nausea, warm and exciting drinks are favorable. Thus coffee, tea, with the addition of a little brandy, may give a greater disposition to resist it, in stimulating the circulation and maintaining a diaphoretic state of the skin. Among the medicines, those which have an analogous effect on the economy may be administered with advantage, such as opium, saffron, acetate of ammonia, &c. When the sickness is declared, recourse is only to be had in the palliatives; lemons, exciting aromatics, relieve some persons; also the horizontal position, especially with the head low, in a hammock or bed suspended like a compass. But if one wishes to shorten the duration of the nauseous influence of the sea and diminish the tribute he must pay to a nautical acclimation, he must struggle with all his energy against the tendency to inaction.

*Therapeutic employment of sea sickness* —A cause which determines in the economy so great a commotion as sea sickness, without leaving any unhappy consequences, as a therapeutic agent merits more attention than has been given it. M. Pellarin thinks that it may be possible to obtain from it valuable results in many acute and chronic affections. This observation was familiar to the ancients. We read in Pliny, "Vomitings, produced by the motion of a vessel, act as a salutary remedy in many diseases of the head, eyes, chest, and in all affections for which hellebore is given." In more modern times, Esquirol and Blanche have judiciously advised its employment in cases of recent mania. But in the few attempts that have been made, there has happened, what might have been easily foreseen, from the true theory of maritime nausea, that the maniacs, highly

excited, have not been affected by sea sickness, whilst the physicians who accompanied them have been a prey to it during the whole voyage. From the knowledge already acquired of the nature and etiology of sea sickness, there seems nothing in the way to second, to aggravate voluntarily its influence in a curative end. Even an apparatus might be made to produce all the effects of rolling and pitching, without the necessity of a sea voyage. By reason of the powerful sedative and hyposthenic influence of sea sickness, may we not draw from its employment the greatest advantages, not only in acute cerebral affections, but also in certain pneumonias, pleurisies, and, finally, in a great number of inflammatory diseases?

#### BIBLIOGRAPHICAL NOTICES.

*Medical Botany, or a description of the most important plants used in Medicine, with their history, properties, and mode of administration.* By R. EGLESFELD GRIFFITH, M. D., Member of the Amer. Phil. Soc., &c. Philadelphia: Lea & Blanchard, 1847. 8vo. pp. 704.

Our country has furnished many valuable additions to the *Materia Medica*, and we doubt not many more highly useful plants exist of which we have no cognizance, and of which we are likely to remain in ignorance so long as the Science of Botany is so generally neglected by our medical men. The additional facilities which the work of Dr. Griffith will afford to such as may desire to engage in the study of the vegetable articles composing the *Materia Medica*, we trust will excite an increased interest in this delightful science. This work supplies a want which has been long felt. The author modestly calls it a compilation, but he is entitled to high credit for the manner in which he has selected and arranged his materials. The articles are arranged according to the natural orders; and for the benefit of such as are not familiar with the subject, a short introduction on the structure and composition of plants has been prefixed, with a copious glossary of terms, and a conspectus of the natural orders of plants which furnish medicinal substances. The whole is illustrated by more than 300 well executed wood engravings. The work is highly creditable both to the author and publishers, and we cordially recommend it to the attentive study of our readers.

*Observations on Aneurism and its Treatment by compression.* By O'BRYEN BELLINGHAM, M. D., Edin., Fellow and Professor in the School of the Royal College of Surgeons in Ireland; &c. &c. London: John Churchill, 1847. Pp. 181.

The above is the title of a very interesting and valuable little work we have just received from the publisher. The nature of the work

does not admit of an extended review, and we cannot convey an idea of its contents better than by subjoining the following extract from its preface :

“The following pages contain a sketch of the history of the treatment of aneurism by compression, from the rude attempts of its earlier advocates to its present improved state; accompanied by an abstract of every case that has been reported, in which compression has been hitherto used—at least of every case which the author has met in a rather extensive reading. The various instruments which have been employed for making pressure are described; and the theories upon which it has at different times been supposed to effect the cure of aneurism are noticed. The author has also endeavored to point out some of the advantages which compression, as a mode of treating aneurism, possesses over the ligature, when the position of the sac permits its application; he has added some rules for the guidance of the surgeon in its application; and it has been all through his aim to refer every invention to its proper author, and every improvement, either in the theory or practice of this method of treating aneurism, to its legitimate source.”

*The Virginia Springs, with their analysis, and some remarks on their Character, together with a Directory for the use of the White Sulphur Water: to which is added a Review of a portion of Wm. Burke's book of the mineral springs of Virginia, &c., and an account of the different routes to the springs.* By JOHN T. MOORMANN, M. D., Resident Physician at the White Sulphur Springs. Philadelphia: Lindsay & Blackiston, 1847. pp. 219, with maps.

The title page of the above work so fully sets forth the “burthen of its song” that we need say nothing more than to express our satisfaction at its perusal and to recommend it to all who would like to know the history and remedial efficacy of the most fashionable watering place in the Southern States.

*Treatment of Diseases of Joints.*—M. Bonnet, Prof. of Clinical Surgery at Lyons, published in 1844 a “Treatise on the Diseases of Joints,” which obtained one of the highest prizes of the Academy of Sciences of Paris. The work abounds in practical views of great importance, a few of which we will note.

In the treatment of *Sprains*, M. Bonnet observes that the usual plan of covering the part with warm or even with cold poultices or saturnine lotions, &c., is objectionable inasmuch as these applications soon acquire the heat peculiar to the joint, and then add to it as would any other covering. He prefers a continuous current of cold water or evaporating lotions kept up so as to reduce the temperature, until all inflammation shall have subsided or have been prevented.



In old cases, which have impaired the movements of the joint, he urges the importance of forced movements frequently repeated until the patient can accomplish them without pain, and affirms having by this means effected the restoration of many joints which had become useless. This reminds us of the plan pursued by the celebrated Sweet, the "natural bone-setter" of New York. This notorious charlatan owes much of his reputation in the treatment of stiff joints to the forcible and daily repeated movements he practices in such cases. These manipulations, although at first very painful, soon cease to be so, and the patient recovers the use of a joint he had thought irretrievably lost. The same plan has been successful in some cases of paralysis of long standing, in which the effusion about the nervous origins had been absorbed, and in which therefore the persistence of the paralysis was the result of mere habit or the conviction of the patient that motion was still impossible. Similar success has attended the use of this method in retractions and distortions occasioned by rheumatic affections.

For *acute arthritis*, commonly called articular rheumatism, M. Bonnet recommends most highly the repeated application of poultices made with alcohol saturated with camphor, cold, of course. In *chronic arthritis*, M. B. insists upon the importance of daily movements in order to prevent ankylosis or shortening of the ligaments and muscles. This should be combined with the use of general remedies calculated to improve the constitution, as the iodides, &c. He objects strongly to all local applications in the form of poultices, and indeed does not know of any entitled to much confidence.

D.

---

### PART III.—MONTHLY PERISCOPE.

*Influence of terrestrial and atmospheric Electricity upon the human system.*—M. Pallas, principal physician in Algiers, presents the results of observations he has recently made in Africa, in order to study the influence of atmospheric and terrestrial electricity upon the human system and to modify the pernicious influence of this physical agent by isolation. This work, which is interesting to the etiology, nature and treatment of the diseases of warm climates, may be condensed into the following propositions:

1st. The majority of the diseases, especially those which belong to the class of neuroses, are occasioned by the influence of increased general electricity, of which the thunder clouds and marshy districts are the most abundant sources.

2d. The marshes, by their geographical arrangement and the effects they produce upon the animal economy, present the greatest analogy to the Galvanic pile. Indeed their action is pernicious and fearful in proportion to the organic and saline matters which their waters hold in solution; hence the reason why salt marshes and

those near the sea-coast are peculiarly injurious to health. The drying up or submersion of marshes present conditions analogous to a galvanic pile deprived of moisture or overflowed, the effects of which are null or very trifling.

3d. The works of naturalists and physiologists have demonstrated that the electricity produced by our machines exerts a special influence upon the nervous system; experience and close observation of facts prove that the diseases developed in a marshy atmosphere are always primarily nervous; and when they become inflammatory it is always by the reaction of the nervous system upon the heart and blood vessels that local and general phlegmasiæ are produced:

4th. The neuroses and intermittent fevers being occasioned, not by the action of a miasm that has never been detected either in the air or in the water of marshes, but through the influence of the exaggerated electricity, any means by which this morbid influence can be modified must naturally and reasonably be the best.

5th. Electric isolation happily fulfils this indication. This isolation may be obtained by fixing to the bed-steads, sofas and chairs, glass or resinous feet. A large number of observations have proven to me that all the patients thus isolated have been cured or relieved of distressing diseases, many of which have resisted all other known means.

The striking analogy between marshes and the galvanic pile, the nature of the affections produced under the influence of atmospheric and terrestrial electricity, and the method of combatting them by isolation, lead us therefore, naturally to the conclusion that not only the diseases of which we speak, but all those which appear epidemically and whose etiology is unknown, are to be attributed to an exaggeration of general electricity, the intensity of which must produce those varied electro-magnetic conditions which disturb the harmony so necessary of the continuance of human health.

[Translated from *Gazette Médicale de Paris*.]

*Hereditary Transmission of Insanity.*—M. Baillarger, in his “*Statistical researches upon the Hereditary Transmission of Insanity*,” arrives at the following conclusions:

1st. The insanity of the mother is more readily transmitted than that of the father.

2d. The mother’s insanity is more apt to affect her daughters than her sons; that of the father is more apt to affect the sons.

3d. Sons are not more apt to derive insanity from the mother than from the father; but daughters are most subject to the insanity of the mother.—Translated from *Gaz. Médicale de Paris*.

*Effects of Etherization upon Respiration.*—M. Ville, furnishes a statement of researches undertaken by himself and M. Blandin, on etherization, at the “*College de France*.” They desired to study only the act of respiration during that singular state, and, as though

nothing can be foreseen in these singular phenomena, they have discovered the opposite to what they expected. Indeed in that state of complete insensibility in which sight is abolished, in which the cold limbs have lost all power to move, respiration produces more carbonic acid than when the organs are in the full exercise of their natural functions. During etherization the carbonic acid produced by respiration increases as the sensibility diminishes, and lessens as this returns. The following are the results of a number of these experiments:

| No. | Carbonic acid produced during normal respiration. | Carbonic acid produced during insensibility. | Preparation of ether contained in the air inhaled. | Duration of inhalation. |
|-----|---|--|--|-------------------------|
| 1.  | 2,41  | 4,84   | 6,70   | 22'30"                  |
| 2.  | 3,05  | 4,38   | 2,17   |                         |
| 3.  | 2,79  | 3,11   | 12,  | 4'                      |
| 4.  | 1,36  | 3,32   | 12,68  | 4'                      |
| 5.  | 2,04  | 4,42   | 14,11  | 2'30"                   |

[Translated from *Ibid.*

*New method for the union of Wounds.*—M. Baudens, surgeon in chief at the "Val-de-Grace," addresses a letter to the Academy, in which he presents a method for uniting wounds, which he has recently discovered, and which he daily practises with complete success at the hospital of "Val-de-Grace." This simple and efficient method is not, according to M. Baudens, liable to the same objections as adhesive plasters and sutures. The following is the author's description of his method: If we have to unite the flaps resulting from a tibio-tarsal amputation, we fix in the bandage carried circularly above the amputation two strong pins, the one in front and the other behind, taking care to leave their heads and points free. The middle of a long cotton thread is now passed like a noose under the free ends of the pins. The threads are then brought down so as to cross each other upon the flaps approximated by the fingers of an aid, and carried up to the pin of the opposite side, to be again brought down so as to operate as a uniting bandage as often as may be necessary, sometimes parallel with the axis of the limb and sometimes crossing each other so as to form a figure of 8. The threads ligating the arteries are also attached to the pins so as not to be torn away when the dressing is removed. The cotton threads exercise a gentle pressure, they are not easily impregnated by liquids, and may maintain their position a long time. The air and the spaces between them permit the humors of the wound to flow readily, and the traction they exert upon the circular bandage placed above the amputation tends to bring down the flesh and to prevent its forming a cone.

This mode of union is applicable to all wounds in general, but it is necessary to know how to place suitably the bandages for the pins. M. B. succeeded remarkably in thus effecting a lineal and prompt union of the wound resulting from the removal of a large wen from the head.—[Translated from *Ibid.*



*Protracted Hiccough relieved by pressure upon the epigastrium.*—This method, as simple as it is energetic, appears to be purely mechanical. It consists in effecting a strong pressure on the epigastrium with the fist, or any other body adequate to the same result. The compressing body may be retained in its place by means of a common truss, should it be necessary to prolong its use. M. Rostan, to whom this plan was suggested by seeing a female subject to this disease always relieve herself by strongly compressing the epigastrium with her hands, has resorted to it ever since with decided advantage, whatever may have been the cause of the hiccough. M. Rayer has also used it with happy effect. It could hardly be expected that such means should prove equally efficacious in all cases, but its simplicity recommends its trial in preference to all others.—[*Translated from Gaz. des Hop.—Revue Méd. Chir.—Bull. Gén. de Thérap.*]

*Burns treated with Ammonia.*—M. Guérard, Physician to the “Hotel Dieu,” has used, for upwards of twenty years, a concentrated solution of ammonia\* in burns of the first and second degrees. He has frequently happened to burn himself with charcoal, phosphorus, gunpowder, &c., and the immediate application of this remedy has always arrested any further development. When the ends of fingers are burnt he plunges them in the liquid without admixture of water. If the seat of the burn was such as to prevent this immersion, he would cover it with a compress dipped in the ammonia, and would prevent its evaporation by covering it with dry cloth. In such cases it is necessary to repeat the application from time to time, whenever the heat or sensation of burning returns. As soon as the ammonia is applied the pain ceases, and the relief continues longer, in proportion to the strength of the solution. According to what M. Guérard has himself experienced, he believes that the application should be continued at least an hour, in order to give permanent relief, after which the burn may be left without any further dressing. If the burn be extensive, one hour will not be sufficient, but then the patient will be apprized of it by the return of pain. M. Guérard does not believe this application adapted to cases in which the skin is removed. The pain is immediately relieved, no phlyctæna are developed, and the cuticle dries and finally falls off like parchment. It is well to observe that if the application has been made to an extensive surface, the compresses should be handled with forceps, for concentrated ammonia very rapidly vesicates the skin in the healthy state. The patient, as well as dresser, should also avoid breathing the vapour, and the vessels used should be made either of tin or of earthenware, inasmuch as copper is readily acted upon by ammonia.

The use of ammonia in burns is not new. Physicians have long since observed that it prevents in such cases the development of inflammation. It has been seen, however, that it is especially for burns of small extent, and in which the skin is not excoriated, that M.

\* Aqua Ammonia, we presume.—*Trans.*

Guérard advises the use of this caustic. Thus far we see no objection to recommending its trial to practitioners. As to burns involving a large surface, it requires more circumspection. There are efficacious means in more common use, such as the oleo-calcareous liniment and carded cotton, prolonged cold baths and fomentations with iced water. There is at this time a case at the "*Hopital St. Louis*," in which the most happy results have been obtained with cold water.—[*Translated from Journ. des Conn. Méd-Chir.—Bull. Gén. de Thérap.*, April, 1847.]

*Camphorated Blistering Ointment.*—M. Mialhe, in an article published in "*l'Union Médicale*," upon Epispastics in general and Cantharides in particular, establishes the following principles:

1st. That the most active epispastics should be preferred; 2d, that epispastic plasters should not be allowed to remain in contact with the skin any longer than is absolutely necessary to effect the detachment of the epidermis; 3d, that the addition of camphor to blisters is of acknowledged usefulness and ought to be generalized. The action of cantharides upon the bladder is lessened in proportion to the rapidity with which the serous exhalation is produced, because there is less cantharidine absorbed. By the addition of camphor, which has the property of softening resins, the blistering ointments are made more fluid, they adhere better to the skin, and consequently act more promptly. Among the means proposed to prevent the specific action of cantharides upon the bladder, none is so good as that indicated by M. Bretonneau, which consists in the interposition between the plaster and the skin of blotting paper dipped in olive oil; the cantharides being soluble in unctuous bodies, the olive oil facilitates its introduction into the system, but this introduction diminishes as soon as the serous effusion takes place, inasmuch as oils are not miscible with aqueous fluids. Hence by this method the irritating influence of cantharidine upon the urinary organs is rarely felt. The following is M. Mialhe's formula:

|                 |   |   |   |   |            |
|-----------------|---|---|---|---|------------|
| R. Cantharides, | - | - | - | - | 400 parts. |
| Hog's Lard,     | - | - | - | - | 25 "       |
| Veal suet,      | - | - | - | - | 25 "       |
| White resin,    | - | - | - | - | 50 "       |
| Yellow wax,     | - | - | - | - | 100 "      |
| Sulph. Ether,   | - | - | - | - | 100 "      |
| Camphor,        | - | - | - | - | 40 "       |

Pulverize the cantharides without having previously dried them, pass them through a sieve and suspend the pulverization as soon as you have obtained one hundred parts of fine powder; place this powder in a large mouthed bottle and add to it the sulphuric ether; put the remainder of the cantharides in a tinned basin with the lard, the suet and a sufficient quantity of water to float the whole, boil gently one hour, continually stirring the mass, then set aside to cool in the same vessel. Now separate the compound which floats on the surface

from the matters that have settled at the bottom of the vessel; melt this fatty compound, filter through cloth into a tinned vessel upon a sand bath. Add the resin, the wax and the camphor; heat until all be completely melted; then add the powdered cantharides and ether, and heat until the ether be completely evaporated, that is to say about an hour. Finally pour the ointment into a marble mortar and stir until it be completely cold.

This ointment, being rather soft, should be spread thinly upon cerecloth (*sparadrap*\*) instead of sheep-skin, as is yet customary with some. The vesicating effect of this application is very prompt. It takes place in from two to three hours at most, according to the susceptibility of the skin, the temperature of the part to which it is applied and the care with which it is kept in contact with the surface.

Although this ointment contains a good portion of camphor, it will be prudent to interpose the oiled paper whenever the action of the cantharides upon the urinary organs is objectionable; or, what will answer as well, the plaster should be left upon the skin not exceeding two hours or two hours and a half, a sufficient quantity of cantharidine being absorbed in that time to produce the local without the general effect.—[*Translated from Bul Gén. de Therap.*

*Remarks on the Alnus Serrulata, common Black Alder*—by JAS. HELMICH, M. D., of Ohio.—I noticed in the July No., for 1846, of the New-York Journal of Medicine and the Collateral Sciences, an article on *Indigenous Medical Botany*, by S. W. Williams. Among the indigenous medical plants named by Dr. Williams, and to which he has called the attention of the readers of your valuable Journal, is the "*Alnus Serrulata*," or common Black Alder. It is not my purpose to gainsay a word that Dr. W. has said in describing its medical use, nor am I certain that he has said all that he has to say about it; but I am sure he has not said all that should be said in its favour. Dr. W. has pointed out several uses of the Black Alder entirely new to me, viz: repelling the milk in the female breast—the inner bark of the root being emetic—a decoction of the cones for the suppression of hemorrhage—and in hæmaturia.

I have long been in the habit of prescribing a decoction of the Black Alder, and more recently of the extract (a more convenient and eligible form) in chronic affections, and more particularly in scrofula and secondary syphilis. I have seen some of the most happy results from its use in both these forms of disease. Mrs. S— was admitted into the county alms house, with secondary syphilis of long standing, and a constitution broken down with the disease and the use of mercury; she had ulcers in the nose and palate, nodes on the head, legs, and arms; and unable to walk from stiffness of joints; indeed she seemed to be a hopeless case. She was ordered a strong decoction of the Black Alder, and a milk and vegetable diet, to which

\*The French "*sparadrap*" is somewhat similar to our patent adhesive plaster. Oil-silk would answer.—*Trans.*



she rigidly adhered for six months, when she left the institution perfectly cured, and remains well up to the present time, a period of three years.

A clergyman's lady of this vicinity had scrofula, with open ulcers, large and ill-conditioned; she was entirely cured by the use of a decoction of the Black Alder. This lady was removed a distance of a hundred miles from this place, and although cured, she continues to use it occasionally as a preventive; she has twice sent to this place to procure, as she says, the "genuine article."

I was acquainted with an intelligent old gentleman, (since dead,) who cured in his own person a cancer of the lip with a beer made from the bark and small branches of the Black Alder.

I mention the above, not as the only cases of cure with this medicine, but as prominent cases in three different forms of disease. I am persuaded that the *Alnus Serrulata* is one of our most valuable vegetable alteratives, and deserves the careful and attentive investigation of the physician, pharmacist, and medical botanist.

More recently I have witnessed the valuable properties of the extract, prepared by the evaporation of the decoction to the consistency of thick tar; it makes a very convenient form for pills and solution. I prescribed a strong decoction of the extract, two months ago, in a case of impetigo of long standing, and which had proved very obstinate, refusing to yield to all the various plans of treatment, both general and local, persisted in for more than three years. The lady was of full habit, somewhat corpulent, but general health good; the disease affected both ankles over the instep. She was directed to drink a decoction of the black alder, and ℥j. of the extract dissolved in ℥viij. of water for a local application twice a day. In two week her husband reported to me "that the ℥j. of extract had done more for her than all other remedies put together." At the present date, two months since the first application, she is entirely cured.

Impetigo is in my experience a very intractable form of disease; yet, in this case it yielded readily to the extract of Black Alder. It is the first and only case I have ever prescribed it in as a local remedy; I intend however to give it a more extended trial in some other diseases, where its tonic and astringent properties will be more fully tested.

I am informed by the individual who prepares the extract, that it is an invaluable remedy for dyspepsia, taken in doses of 3ss. three times daily.—[*New-York Journal of Medicine.*

*Influence of Coffee upon Sulphate of Quinine.*—According to the experiments of M. Dorvault, the sulphate of quinine, with the exception of a very small quantity, remains unchanged by the action of coffee. According to him, the disappearance of the bitter taste is due partly to the transformation of the portion of quinine which is dissolved into a tannate, and partly to the action of the other principles of coffee. M. D. thinks that it is only the dissolved portion of

the sulphate which affects the organ of taste, and that this is decomposed by the tannin of the coffee, whilst the undissolved portions of the sulphate of quinine remain unchanged.

Sulphate of quinine dissolved by the aid of sulphuric acid or alcohol, looses but very little of its bitterness by admixture with coffee. Experience appears to have established the fact that the medicinal properties of the sulphate of quinine are not impaired by the action of coffee.

M. D. recommends the following formula for the administration of "*quininized coffee*."

R. Coffee, parched and ground, 10 parts.

Boiling water, 100 "

Treat by displacement, filter and add sulphate of quinine 1 part and sugar 15 parts.—[*Trans. from Bul. Gén de Therap.*, April, 1847.

*On the Syrup of Iodide of Iron.* By Messrs. T. and H. SMITH, Edinburgh.—The process used by us for the syrup of iodide of iron is a modification of the formula of the Edinburgh Pharmacopœia, and, as we have by repeated trials long proved its value, it is here given for the use of the readers of the *Pharmaceutical Journal*.

Let a solution of iodide of iron be made in a flask with six hundred grains of iodine, two hundred grains of pure iron filings, and six ounces of *cold water*. The action being finished, after smart agitation for a few minutes, let the liquid, while yet hot from the intense chemical action, be boiled over a gas flame, or in any other more convenient way, till its brown colour has disappeared, which is easily known by the froth becoming white. Let the liquid be now at once filtered through a small filter into a bottle, which has previously been marked, by pasting on the outside of the bottle a small slip of paper at the level of eighteen fluid ounces, and containing thirteen ounces and a half of refined sugar, broken down into pieces about the size of peas. When the solution has all passed through, which fortunately takes place with unusual rapidity, let the filter be washed with boiling water, a further quantity of which must also be poured into the bottle till the liquid reaches the level of the mark. Let the bottle then be introduced into a hot water-bath and briskly shaken at short intervals, till the sugar is quite dissolved: and having adjusted the level of the syrup to the mark by the addition of water, after again shaking the bottle, let the syrup, without a moment's delay, be bottled into small phials, and secured as much as possible from contact with the air and light, by careful corking, and covering the bottles with some dark-coloured paper. These are the proportions adopted in the Edinburgh Pharmacopœia, and the syrup contains one grain of the iodide in twelve minims, or five grains in one drachm; but as the syrup first proposed by Dr. A. T. Thomson is weaker by two-fifths, containing three grains to the drachm, and which we believe is the strength of the syrup used in England, it is evident that the proportions must be varied accordingly. They will therefore stand thus:—

252 grains iodine,  
100 grains iron filings,  
2½ ozs. cold water,  
10 ozs. pure sugar.

Let the syrup, when finished, measure twelve ounces and a half, the level occupied by this quantity having been marked off on the bottle beforehand. It is advisable that the bottle used in the preparation of the syrup should not have a capacity more than about a third above the quantity to be made.—[*Pharmaceutical Journal*.]

*Cajeput Oil as a Remedial Agent*—by J. A. PRESTON, M. D., of Long Island, N. Y.—In submitting the subjoined remarks upon the use of the oil. cajuputi, I am influenced less by the desire of communicating than eliciting information. I am not aware to what precise extent it has been used in this country, neither have I been able to learn the indications which other practitioners have found it to answer. The expense of the article, and the consequent temptation to adulteration, doubtless, have deterred physicians from using it to any extent. This valuable oil is principally manufactured on the island of Buoro, and thence exported to Holland. From Holland it is re-exported to the United States, paying a heavy duty, which correspondingly enhances its price. At the distilleries in Buoro and Amboyna, the oil is sold for about \$1 per bottle, averaging f ʒxxiv. each. But the commerce being entirely monopolized by the Dutch, it is rarely that other nations can obtain it at this low rate. At Batavia, upon the island of Java, about 400 miles distant from Buoro, it is sold as high as \$5 per bottle. But I leave its history to speak of its uses. Having obtained a couple of bottles of the pure oil direct from the Moluccas, I proceeded to experiment with the same whenever an opportunity offered in which I judged it could be used with advantage.

It was at first prescribed endermically for several cases of chronic rheumatism, which had hitherto resisted other treatment. Its success in these cases induced me to use it in others, which I have since done with like success. I should remark that the oil was applied freely, regardless of the restrictions so religiously enjoined by the Malays. From its almost instantaneous action in relaxing muscular spasm, in relieving spasmodic colic, and persistent singultus, I am induced to conceive that it operates directly upon the nervous system as a powerful antispasmodic. I have administered it in several cases of flatulent colic, invariably with the happiest results. The effect has been instantaneous in relaxing the spasm, and the regurgitation of flatus has given immediate relief. A few drops, four to six, taken in water or upon a piece of sugar, will arrest the spasmodic action of the diaphragm in singultus, with the greatest certainty. Conjointly with its internal administration, fifteen or twenty drops may be applied externally to the epigastrium. Diluted with three or four parts of ol. amygd. dulc. I have found it an excellent application for deafness resulting from deficient or hardened cerumen. For this purpose a few drops of this mixture may be placed within the external meatus



upon a dossil of cotton, while the pure oil is applied anteriorly to the ear, directly over the facial nerve. As an odontalgic it is far superior to the ol. creosoti, and, applied directly to the exposed nerve, often relieves the pain entirely.

But I am trespassing upon your patience, and forbear enumerating further indications, lest your readers suspect me of wishing to immortalize myself as the discoverer of another "golden drop." I confess my aspirations are not restricted to success in the practice of my profession, but compass the acquisition of those *golden drops* more essential to life than the far-famed elixir of Paracelsus.

In conclusion, allow me to suggest that, if I am correct in my views of the *modus operandi* of the article under consideration, might we not hope some more signal advantage from its use in colica pictonum, spasmodic cholera, tetanus, and other spasmodic diseases.—[*Boston Med. and Surg. Journal.*

*Assafœtida used to prevent the death of the fœtus-in-utero.*—The fœtus-in-utero may die at any time between the commencement and full term of gestation, independently of the process of parturition, or of any appreciable accident, and apparently in many instances from a pathological condition of the uterus, partaking of the nature of debility or want of tone. Dr. Gaetano Laferla, of Malta, in endeavoring to adapt a suitable treatment to such cases, has arrived at the conclusion that assafœtida will best answer the indications of exciting the uterus and of restoring its tonicity and vigour, without risk of producing dangerous contractions of this organ. But before resorting to it he considers the mother's temperament and the period which her previous abortions have occurred. To those of a sanguineous or bilious temperament, he administers from 2 to 4 grains less of the assafœtida per day than he would to others. He also takes care that the female shall use, up to the period of her other abortions, an aggregate of assafœtida equal to from 10 to 15 grammes (from 160 to 240 grains). He gives the assafœtida in doses of 2 grains, made into a pill with the extract of chamomile,\* morning and night, with a cup of coffee or other beverage. This dose should be increased as follows: if abortion has previously occurred during the first three months, the dose should be increased every two days; if during the second three months, it should be increased every four or five days; and, finally, if during the three last, it should be increased every six or eight days.

According to Dr. Laferla, the chance of success is increased by commencing the treatment before pregnancy. He then prescribes from 3 to 4 grains, morning and night, until conception have occurred. When this is ascertained, he reduces the dose to 2 grains, and continues at this, provided the movements of the fœtus are of the natural strength and that there are no threatening symptoms, until a month before the time of previous abortions. The author reports

\* Ext. Gentian would be a good substitute.—*Translator.*

---

a number of cases illustrating the efficacy of his method.—[*Translated from Revue Méd.-Chir.—Bull. Gén. de Thérap.*, April, 1847.]

---

*New Method of Exciting Premature Delivery.*—The manifestation of contractions occasioned by injections made into the uterus during the treatment of an obstinate affection of this organ by Dr. Cohen, of Hamburgh, suggested to him the idea of provoking premature delivery by this method, which is painless, certain and expeditious. He proceeds as follows: a small pewter syringe, containing from 2 oz. to 2½ oz. of fluid, with a canula a line or two in diameter and 8 or 9 inches long, bent like a female catheter, is used. The patient being placed upon the back, with her hips elevated, he introduces the canula between the anterior wall of the uterus and the ovum, guiding the instrument with two fingers carried as far as the posterior lip. The free extremity of the syringe is depressed, and the canula projected beneath the pubes until it has penetrated about two inches into the uterus; he now commences the injection, which is forced up gradually, taking care to elevate the syringe a little so as to prevent the end of the canula from resting against the uterine walls, and to change its position whenever there seems to be any obstacle to the flow of its contents. The syringe is then gradually withdrawn, and the female may walk about in ten minutes; if no symptoms occur in six hours, the injection is to be repeated. The liquid used by Dr. Cohen is tar water, but he thinks that various others might answer equally well. The author relates but one case in support of his plan, but this is as satisfactory as possible. Two injections, at intervals of five hours, without giving any pain, were sufficient to induce delivery without any unpleasant consequence.—[*Translated from Bulletin Gén. de Thérap.*, April, 1847.]

---

*Means of ascertaining if Alcohol be perfectly pure.*—M. Cassoria employs the anhydrous sulphate of copper to determine if alcohol contains any water. The salt will remain white, if put in anhydrous alcohol in a well stopped bottle, but will become blue if the alcohol contains any water.—[*Translated from Journ. de Pharm.—Bulletin Gén. de Thérap.*]

---

*Means of preventing the corroding action of Urine upon the Skin.*—Urine in its normal state contains, as is well known, salts of potash, soda, lime and ammonia, as well as acids, free or combined with urea. According to the food taken, the proportion and nature of these elements vary more or less. In some cases the alkaline predominates, in others the acid elements. In the latter state of things, should accident or disease occasion the urine to remain in contact with the skin, this would be corroded by the excess of acids. This not unfrequently occurs during incontinence of urine. In order to obviate this serious inconvenience, M. Maurat, “interne,” at the “*Hopital St. Louis*,” resorted to a topical application capable of

absorbing and neutralizing the acid so as to form salts that were very nearly insoluble and unirritating to the skin. Iron and magnesia seem to promise most. For this purpose he formed a paste with an admixture of equal parts of calcined magnesia and of sesqui-oxide of iron with tepid water, with which he covered the parts exposed to the action of the urine. Those parts which, from their inclined position, might prevent the paste from adhering, he previously powdered with dextrine. In the two only cases in which M. Maurat has been able to use this paste, he has attained the desired result.—[*Translated from Rev. Méd-Chir. de Paris.*—*Bull. Gén. de Thér.*, April, 1847.

*Method of detecting the presence of Cotton in Linen.*—M. Kindt, a Bohemian apothecary, proposes to detect the presence of cotton in linen, by a process based upon the principle that the fibre of cotton is more rapidly dissolved in concentrated sulphuric acid than that of either hemp or flax. The cloth having been thoroughly deprived of its dressing by being boiled some time in water, should be well dried. One end of the piece should then be plunged in concentrated sulphuric acid, and left in it from one to two minutes. The cloth becomes transparent, and should be well washed in water, rubbing it with the fingers, if necessary, to favor the removal of the gummy matter which has been produced. It should now be rinsed in water holding in solution a small quantity of potash or other alkaline substance to neutralize any acid it may still contain, and again in pure water, and finally dried. If the cloth contains any cotton this will have been dissolved, and its absence may be readily detected by comparing the portion subjected to the acid with that which was not.

If the specimen were allowed to remain too long in the sulphuric acid, the linen fibres would also be acted upon, but if the cloth were made entirely of flax the corrosion would be uniform. The cotton however is always first acted upon, and is converted into gum whilst the linen threads still remain white and opaque.—[*Translated from Journ. de Pharm.*, 1847.—*Bull. Gén. de Thérap.*

---

## MEDICAL INTELLIGENCE.

LETTER FROM THE EDITOR, DATED,

PARIS, August, 1847.

*To the Editors, pro. tem., of the Southern Med. and Surg. Journal:*

Gentlemen—Thanking you, as I have done privately, and now do publicly, for your kind offer to conduct the Journal during my unexpected, and I trust brief absence, I propose to send you a few items of Medical Intelligence by the steamer of the 19th. My sojourn here, however, has been yet so short, that I have but little to communicate.

*Epilepsy.*—You are aware that it is a case of this affection that has brought me here, and which supervened upon premature delivery. I left for the Journal a short article translated from M. Trousseau, containing the wonderful cures he had effected by prolonged warm baths, with a small current of cold water falling at the same time upon the head, in acute diseases within the cranium. I had come to Paris to consult Professors Velpeau, Rostan and Trousseau, and have



already accomplished my object. The latter gentleman, could not, because of previous engagements, meet at the consultation, and therefore made his visit alone. After obtaining a history of the case, which is briefly this—the first attack of convulsions coming on about three weeks after the premature accouchement, then the second about the end of the same interval, with subsequent recurrences varying from four to nine weeks—a permanent pain in the head, which has never yet been entirely relieved—failure of all medication, as nitrate of silver, oxide of silver, arsenic, quinine, valerianate of zinc, hydriodate of potash, active purgation, ptyalism, seton to the neck, issues to the arm and leg, cold affusion to the head, diet, narcotics of various kinds, &c., &c., visit to the Madison Springs, Saratoga Springs, travelling, a sea voyage of thirty days—nothing as yet having interrupted the attacks. Prof. Trousseau recommended one medical and one surgical means—the powder of the root or leaves of *belladonna* in small regulated and guarded doses for several months, and *ligatures to the primitive carotids*. He was aware the latter proposition would not be sanctioned by the profession, but he repeatedly said were it his own son affected with epilepsy, he would not hesitate a moment to ligate these arteries. We do not know what this disease is, he remarked, and so profound a change in the nutrition of the brain would be produced by closure of the carotids, that I know no means in this affection more available, or which promises as much as their ligation. Prof. Rostan assumed, in the consultation with Prof. Velpeau, the management of the case, and promised very kindly to write out in full, directions for it. These I shall not get until too late for this mail. The plan, however, agreed upon by them, consisted in prolonged sedative baths to the skin, hot pediluvia, with cold stream of water to the head, regulation of the bowels, and the powdered root of belladonna.

There being no hereditary tendency in this case, and no permanent external symptom of disease in the brain, they all think, by great care and perseverance in the treatment, that it will be cured. They consider it a severe one, especially on account of its persistence, now sixteen months; and that it is cephalic, and not now dependent on the uterus.

Each of the above named gentlemen utterly refused any compensation for their services in this case.

I may also obtain the opinions of Drs. Marshall Hall, C. J. B. Williams, and Watson, of London, in reference to this case.

*Case of Extra Uterine Conception*—This is a female, some 30 to 35 years of age, in one of the wards of M. Velpeau. Portions of the fetus having passed from the bladder *per uretram*, a caustic issue has been established below the navel, through the abdominal wall. The case has not apparently been benefited, and the patient seems to be sinking. (Died.)

*Aneurism at bend of Elbow, patient never having been bled*.—This is a curious case, and has been presented to nearly all the surgeons of note in Paris, no two of whom agreed in the diagnosis. M. Velpeau made a small puncture into the tumor; size of a common apple, and observing its diminution by pressure upon the humoral artery continued for several hours, diagnosed an aneurism. There was no pulsation in the swelling. He tied the brachial artery, and the patient is doing well. The ligature has fallen and the tumor has diminished.

I have as yet witnessed no capital or impotent operations since my arrival here. In the fashionable circles this is known as the dull season of the year, and every occupation of life seems to feel the influence. There are fewer lectures going on, and fewer surgical operations in Paris, than I have ever known.

Of course, one of my first visits was to La Charité Hospital, to see and hear that renowned surgeon, M. Velpeau. He at once recognized me and welcomed me cordially to Paris, expressing his sympathy for the cause which had brought me here, and offering his services to aid me in any way.

Of four operations he performed, the *ether* was inhaled in two—to the two others, (polypi of the nose,) it was inapplicable. The first was that most horrible of operations, the evulsion of the nail of the great toe. The ether was inhaled from a very simple apparatus, a hog's bladder covered with a piece of silk like a bag, and the nose and mouth embraced by the opening and secured as a lady's common reticule. The second case was one of tumors in each mammae of a country

girl, aged 19 years. They were steatomatous in character, and about the size of a turkey egg; one in each breast, and their origin unknown. Both these patients declared themselves to be insensible and unconscious to pain or to what was passing around them. The openings left by the removal of the tumors were crammed full of coarse lint, and then well wadded and compressed upon the surface—this is the month of August, and suppuration abounds in the hospital.

M. Velpeau's Lectures have been on diffused phlegmonous inflammation, and a recapitulation of the fractures received into his wards during the last six months. He stated that diffused phlegmonous inflammation could not be arrested after the third or fourth day. There was a destruction of the cellular tissue at this period of the disease, a sort of gangrene or even sphacelus, and it must be gotten rid of by an opening or openings through the skin. To arrest or abort the inflammation in the early stage, he recommended first, compression by a well applied roller bandage; 2d, topical and general bleeding; 3d, mercurial ointment; 4th, blisters to cover the whole surface inflamed. He dwelt especially upon the first means, the therapeutic effects of a roller bandage in external inflammations.

*Death of M. BROUSSAIS.*—Casimir Broussais, son of the late illustrious physician of that name, recently died at the age of 44 years. His death was caused by Cancer of the Rectum, the same disease that destroyed his father. The deceased was high in rank in the Army, and succeeded Desgenettes in a Professorship in the Faculty of Medicine of Paris.

METEOROLOGICAL OBSERVATIONS, for August, 1847, at Augusta, Ga. Latitude 33° 27' north—Longitude 4° 32' west Wash. Altitude above tide 152 feet.

| Aug. | Sun Rise. |           | 4, P. M. |           | WIND. | REMARKS.                          |
|------|-----------|-----------|----------|-----------|-------|-----------------------------------|
|      | Ther.     | Bar.      | Ther.    | Bar.      |       |                                   |
| 1    | 69        | 29 74-100 | 71       | 29 77-100 | N. E. | Rain, 1 9-100 of an inch.         |
| 2    | 68        | " 75-100  | 70       | " 73-100  | N. E. | Rain, 1 26-100 of an inch.        |
| 3    | 70        | " 73-100  | 80       | " 75-100  | N. W. | Cloudy.                           |
| 4    | 68        | " 76-100  | 84       | " 74-100  | N. W. | Fair.                             |
| 5    | 65        | " 72-100  | 81       | " 58-100  | S. W. | Fair—rain during night.           |
| 6    | 68        | " 45-100  | 76       | " 44-100  | S. W. | Cloudy—rain 11 A.M. 40-100 in.    |
| 7    | 69        | " 45-100  | 84       | " 51-100  | N. W. | Fair—some clouds.                 |
| 8    | 70        | " 68-100  | 84       | " 67-100  | S. W. | Fair.                             |
| 9    | 68        | " 86-100  | 76       | " 88-100  | S. E. | Rain, 18-100 of an inch.          |
| 10   | 67        | " 91-100  | 70       | " 95-100  | N. W. | Rain, 57-100 of an inch.          |
| 11   | 67        | " 95-100  | 84       | " 93-100  | N. E. | Fair—shower at 4 P.M.             |
| 12   | 68        | " 93-100  | 86       | " 87-100  | S. E. | Fair—shower at 11 P.M.            |
| 13   | 69        | " 87-100  | 83       | " 83-100  | S. E. | Rain, 45-100 of an inch.          |
| 14   | 68        | " 84-100  | 87       | " 84-100  | N. W. | Rain, 10-100 of an inch.          |
| 15   | 71        | " 86-100  | 80       | " 85-100  | N. E. | Fair.                             |
| 16   | 69        | " 87-100  | 77       | " 84-100  | N. W. | Cloudy—thunder.                   |
| 17   | 68        | " 84-100  | 77       | " 82-100  | S. W. | Rain, 35-100 of an inch.          |
| 18   | 65        | " 81-100  | 78       | " 77-100  | S. W. | Rain.                             |
| 19   | 67        | " 77-100  | 77       | " 77-100  | S. W. | Fair—sprinkle at 3 P.M.           |
| 20   | 64        | " 79-100  | 86       | " 78-100  | N. E. | Fair.                             |
| 21   | 70        | " 82-100  | 85       | " 75-100  | S. W. | Fair—rain at 5 P.M. 1 inch.       |
| 22   | 71        | " 85-100  | 84       | " 83-100  | S.    | Fair.                             |
| 23   | 69        | " 83-100  | 89       | " 83-100  | N. W. | Fair—rain at 6 P.M. 32-100 of in. |
| 24   | 69        | " 84-100  | 88       | " 84-100  | N. W. | Fair.                             |
| 25   | 67        | " 90-100  | 70       | " 90-100  | N. W. | Cloudy.                           |
| 26   | 64        | " 93-100  | 76       | " 92-100  | N. E. | Cloudy.                           |
| 27   | 66        | " 91-100  | 69       | " 84-100  | W.    | Rain.                             |
| 28   | 65        | " 84-100  | 78       | " 83-100  | N. W. | Fair.                             |
| 29   | 67        | " 81-100  | 83       | " 87-100  | N. E. | Cloudy. [an inch.                 |
| 30   | 69        | " 87-100  | 86       | " 88-100  | S. E. | Fair—rain at 10 P.M. 15-100 of    |
| 31   | 68        | " 88-000  | 83       | " 89-100  | S. E. | Fair.                             |

16 Fair days. Quantity of Rain 5 inches and 87-100. Wind East of N. and S. 12 days. West of do. 18 days.

# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—NOVEMBER, 1847.

[No. 11.]

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE XL.

*Random Thoughts on Febris Typhoides.* By C. T. QUINTARD, M.D.,  
of Athens, Ga.

Every writer on this disease, seems to have arrived at different conclusions, not only as regards its pathology, but the treatment indicated; each deciding according to his own favorite theory: nor does this difference depend so much on a deficiency of critical judgment as on the different characters the disease assumes under variable circumstances. Reasoning from analogy, as physicians are necessarily obliged to do, we would naturally presume, that the disease would at least be described accurately, and that those persons engaged in the pursuit of pathology, would be enabled to give us clear ideas of the morbid state induced by the action of the poisonous miasm. But inasmuch as we have as yet no clear notions concerning typhoid fever, we see how slippery a foundation our conclusions have, when they are based on analogy only,—and yet there are collateral evidences which ought to guide and direct us not only in determining the action of the exciting cause, but in providing us with a treatment adapted, in its general outlines, to the variable states of the body when suffering under the disease. In the retirement of the study, medical men are too apt to neglect the facts observed at the bed-side and allow the imagination to run wild before reason. This leads them to practice upon theory without giving proper weight to the experience gleaned from close observation. “That every thing is easy when you know it,” sounds like a simple truism; when, in fact, it is a wise apothegm. It declares that, be an object never so difficult to be attained in the outset, we may, by the necessary pains



and labour, obtain such a mastery over it as to be surprised that we were ever discouraged in its pursuit. It too often happens that medical writers stop in *medias res*—arrive at conclusions—sum up arguments—and without hesitation “make books,” with which to train medical shoots. There is a fondness in the use of the personal pronoun “I,” which leads them to neglect, or pass lightly over the experience of others, and depend solely on their own resources. We very seldom see among medical philosophers, the modesty which characterized the distinguished Dr. Hartley, when offering the result of his labours to the world—desiring his readers “to expect nothing but hints and conjecture in difficult and obscure matters, and a short detail of the principle reasons and evidences in those that are clear,” &c.

Persons reviewing a disease in different latitudes, notice the same general characteristics, while there are many of the symptoms which vary exceedingly.

Thus with Typhus:—In cold climates, when it terminates favorably, it generally abates towards the close of the second, or commencement of the third week; but in warm climates it seldom continues above a week or ten days, if so long. It is an unimportant matter in the general description of a disease, as to what local affections predominate, and add intensity to the constitutional symptoms, since the malady affects every portion of the animal economy. The usual name of the disease under consideration, leads us to look for the most prominent symptom, viz., disturbance of the nervous system—(Typhus fever, τυφος, stupor)—and although the names of *ship-fever*, *hospital-fever*, *typhus-fever*, *typhoid-fever*, *jail-fever*, *putrid-fever*, *adynamic-fever*, *camp-fever*, and *petechial-fever*, have all been used in describing the disease, we nevertheless find the same general outlines characterizing it, be it in the north or the south—on ship-board or on land—in the rich man’s home or the poor man’s hut, the disease is ushered in by nervous derangement; intestinal irritation follows, the secretions become vitiated, in fact “we have the *morbis totius substantiæ* of the earlier physicians. In the course of the disease, we may have local inflammations—we may have the lungs prominently affected—or cerebral disturbance may be the most prominent symptom—or irritation of the intestinal canal may predominate. These local affections oftener occur in the severer forms of the disease.

No person can walk the wards of a hospital in which there are a

number of cases of this disease, without noting the low muttering, the delirium mite, or the fierce and incoherent ravings, the subsultus tendinum, the redness of the eyes—all indicating the immense shock sustained by the grand seat of nervous power. Now these symptoms all occur with different degrees of intensity, as has been the action of the specific cause that produced the disease, and those consecutive causes, such as mental depression, cold and fatigue, or venereal excesses which assist, aid, and determine the action of the specific cause. With these general remarks, we shall offer a few hints relative to the particular character of Typhoid fever, as observed in the cases under our care at the Bellevue Hospital, New-York. Let us first ask, what is Typhus fever?

“Typhus fever is the action of a specific poison, generated in decaying vegetable or animal substances, producing general mal-aise, imperfect or suffused vascular reaction, with depressed vital power, manifested especially in the nervous, vascular and muscular systems, and giving rise to changes more or less evident in the circulating fluids and soft solids.” (Copland’s Defin., Fever Typhoid.)

“It will be observed that I treat of typhus and typhoid fever under the same general head. I am satisfied of the identity of all the modifications of continued fever, collected by writers under these names, and am persuaded that the more closely the subject is examined the more this opinion is destined to prevail.” (Dickson’s Practice, vol. i. p. 401.)

“There is every variety in continued fever; both as to the degree of excitement, and the degree of strength;—from the very highest excitement, and a high degree of strength, down to the most absolute prostration that can be present; and from no putrescency, up to a high degree of it.” (Elliotson’s Practice, Am. Ed., p. 289.)

“A species of continued fever, characterized by great debility, a tendency in the fluids to putrefaction, and the ordinary symptoms of fever.” (Encyclopædia Americana, vol. v. Art. Fever.)

“There is but one species of continued fever, although there are many varieties.” (Watson.)

“Intermittent, remittent, and continued fevers, arise from the same cause, and are the same disease, with certain modifications.” (Armstrong.)

The term “fever” is by itself vague and indefinite, for the same disorder is baptized by a dozen different names; hence, for the same disease we have the appellations of typhus, typhoid, continued, and

remittent fever, &c., &c. This would be of no practical importance if diseases were not sometimes prescribed according to the names they bear, without reference to the morbid states of the body. Typhus fever originates in any locality where men are deprived of pure, respirable air, as in crowded vessels—contaminated hospitals—dark narrow lanes, such as are not uncommon in the great metropolis of the Union. The patient first loses his appetite, a slight fur covers his tongue, and he complains of a bad taste in his mouth; great lassitude and debility, disinclination to any exertion either mental or physical, occasional chills, anxiety, sighing, and oppression at the chest, mark the forming stage of the disease; the skin becomes hot; the pulse small, frequent and weak; pain is felt across the brow, accompanied with throbbing at the temples; dizziness and stupidity, with an unnatural brilliancy about the eyes, indicate the action of the miasm upon the nervous system. These are the symptoms which indicate the period of invasion, which authors describe as belonging, not only to the typhus, but the typhoid, and which in the subsequent determination they receive from consecutive causes, especially the condition of the animal economy at the time of the attack, mark the two varieties which some authors insist on so strenuously.

Michael Owen, aged 37, arrived in this country per ship Pontiac, and admitted to the Bellevue Hospital Jan. 14th, 1847, together with eighteen other cases from the same ship. Patient exhibited on examination a severe attack of constitutional disease. Among the most prominent symptoms were excessive debility, pain of head, total anorexia, tongue dry, black, cracked, and mouth lined with sordes; pulse frequent, small and weak, and unconscious stools. On the second day after admission I noticed petechiæ, and a somewhat flatulent state of the abdomen. These symptoms rapidly increased in severity, and the patient died on the fourth day after admission. The post-mortem revealed considerable affusion into the ventricles of the brain, and vascular turgescence, but no softening or other morbid condition of the cerebral mass; old adhesions existed between the pleura costalis and pleura pulmonalis of the left side. The liver was slightly congested; the mucous membrane of the stomach was injected, while that of the colon, in its transverse and descending portions were corroded and gangrenous in spots. The glands of Peyer were ulcerated and the mucous follicles enlarged. This was a case of true typhoid fever, exhibiting not only the every day symptoms of the disease, but also the anatomical characters attributed to it by Petit, Louis, Andral, Chomel, and others.



Patrick Flynn, aged 30, admitted the morning after his arrival, from same ship. Had slept in the same berth with Owen, and had, during the passage, been exposed to the same miasm. Presented on examination the following appearances:—Tongue coated with a yellowish fur; pulse small, frequent, and easily compressible; great prostration of the vital powers; pain about the upper divisions of the abdomen, with such complete stupidity, that it was with great difficulty he could be roused to reply to any simple question; countenance very yellow. This patient went through the disease, which terminated favorably about the third week. During its course his bowels were torpid, and were but seldom moved—the tongue was as well marked as in case 1st, and all the symptoms were the same, except the flatulent state of the abdomen and the unconscious stools. Petechiæ were observed during the attack. This was also a case of pure *typhoid*, but of a milder nature.

Michael Healy, aged 23, was admitted same day from same ship. Strong constitution and very great muscular development. In this case the poison appeared to act solely on the nervous energies; the patient was nearly in a state of coma somnolentum, not having the power of wakening spontaneously, and when aroused, slowly opening his eyes and answering incoherently, and immediately falling into the same state of profound torpor. No petechiæ or exanthematous eruption was noticed—the abdomen was tense, and the bowels constipated. Cups were applied *ad nuchæ*, and brisk cathartics administered; but no favorable symptom was evident, and the patient died on the fifth day after admission. So great was the shock sustained by the vital powers, that the patient sunk without any effort of the vis medicatrix to respond to any remedy—slight hemorrhage from the gums occurred on the third day. In examining the brain, six hours after death, I found considerable effusion of serum in the arachnoid, and a general fullness of the bloodvessels. There was also about two drachms effused into the ventricles, and numerous bloody spots in the cerebrum. The lungs were slightly congested, and Peyer's glands a very little enlarged. These were all the morbid appearances revealed by the autopsy of this pure *nervo-typhus* case.

John Shannon, aged 36, admitted two days after from same ship, exhibited, on examination, all the symptoms detailed in case 2d, but not of so great intensity; complained of a "smothering about the heart," and some nausea, but began convalescing at the end of the second week.

Here we have the same cause acting differently in each case; and as it is natural for us to judge of things of this nature by analogy, we will endeavor to trace the similitude which existed between all the cases. We believe they were all originated by the same miasm, its action being modified by circumstances, and that this miasm is subject to the same laws. The same symptoms marked the irritatory stage of each, except case 3d, where the action of the miasm was felt with much intensity, and concentrated upon the nervous energy. In cases 1st, 2d and 4th, the fever was accompanied by chills. In case 1st, the action of the miasm was exhibited very speedily on the intestine canal, as seen in the ulceration of Peyer's glands in the erosions of the mucous membrane of the colon, &c. Here a like cause produced a rapidly fatal effect, which in cases 2d and 4th exhibited nothing peculiar in its action. Must we not attribute these varieties to the different states of the system at the period of attack, as well as the different idiosyncrasys of the individuals? It is at least a problem in this type of fever which has not yet been solved. Why should animal miasm produce under like circumstances—typhus mitior—and typhus gravior? Why does it not act alike in all cases? What effect has temperament in modifying its action? These questions may in time be solved by zealous and unwearied observation, but they demand freedom of thought and a scrutinizing eye. They are the mysteries of nature, crippled and prevented in its workings.

With a few remarks concerning the contagious nature of this disease we will close.

Dr. L. H. Stone, of the Bellevue Hospital, writes me as follows: "I believe Typhus fever is as truly contagious as small-pox, but it is necessary for a person to be longer subjected to the influence of the miasm—the specific cause." Contagious diseases are produced either by a virus capable of transmitting them, or by miasmata proceeding from a sick individual. In typhus gravior, no person will doubt the fact, that this miasm is produced and will generate the same disease, or that this disease may be produced at any time when a large number of persons are crowded into a confined space and deprived of pure air, proper nourishment, and the means of cleanliness—for in such a case, the specific cause is generated and will act in the ratio of its intensity. Hence the jail fevers formerly so destructive; hence, also, the black assizes of the Old Bailey, Exeter, Oxford, and Cambridge, in which the infection spread with deadly

results to the lawyers and people in the courts. That Dr. Stone has reference to circumstances similar to those which produced the old jail fever, is evident, for he continues—"The poison is about as certain in its effect, as that which emanates small-pox where there is such a mass congregated as we have had at the Hospital for the last few months—I could mention fifty cases in which persons have contracted the disease by exposure to the noxious air of the wards of Bellevue." "About the first of June we had over *five hundred* cases of Typhus fever in the Hospital—and in all over *one thousand* patients in the Hospital proper."\* We can readily conceive how active the miasm may prove in rooms so crowded with this disease that the patients lay side by side on the floor. "At one time," says Dr. S., "I had 87 patients in one ward," and this, a ward containing usually 30 beds.

"Contagion is by far the most active agent in the propagation of fever; but, when terror, hunger, cold and moisture, in fine anything, as Hufeland remarks, which tends to weaken the vital powers, and to act as a predisposing cause, operate, it becomes truly influential; and it is then, that a single focus of infection may involve thousands and entail the worst results. Let the current crop fail, starvation and beggary result; the complaint soon springs up and is *circulated in every direction on the persons of houseless wanderers*. Eighty thousand are reported to have perished in 1740, and again in 1817, of fever in Ireland; and if we suppose one died in thirty, it yields each time, an aggregate of nearly two millions and a half, and affords some conceptions of the desolation, misery and suspension of human pursuits, such a scourge inflicts."—*Methodus Medendi*, London, 1842.

What are we to expect from the present state of Ireland! But not only is it certain that this disease is generated under circumstances favorable to the development of the exciting cause; it is *probable* that it may be contracted when no local circumstances generate animal or vegetable miasm, but be "circulated on the persons of houseless wanderers."

We find the following in the Albany Argus of 31st June: "We

---

\* The buildings at Bellevue are divided as follows:

- 1st, the Alms house, containing between 2 and 3000 inmates;
- 2d, the Ulcer wards, with about 150 patients;
- 3d, the north and south wing, appropriated to Phthisis and chronic diseases;
- 4th, the main Hospital, in which all acute diseases are kept and in which the typhus fever cases are accommodated.



regret to learn that the family of Mr. Mead, of Duaneburgh, Schenectaday county, have been severe sufferers by the accidental introduction of ship fever into their house. We understand that a party of emigrants, proceeding on foot along the Cherry Valley Turnpike, and passing the house of Mr. M., one of the party, an elderly person, was observed to be very unwell. The party was asked by some of the members of Mr. M's family to remain over night, and having been served to an evening meal, slept in an out-building adjoining the house. On the following day one of Mr. Mead's family was taken sick, and the sickness pronounced by their medical attendant to be ship fever, under which disease they learned the sick emigrant was laboring. The disease spread to other members of the family, and yesterday morning our informant learned that three were dead and a fourth so seriously unwell that recovery was hopeless."

Dr. Douglass, the health officer, stationed below Québec, has written to the authorities of Montreal and other places in the Provinces. The following is an extract from his letter, dated Grosse Isle, June 8th:—"Out of the 4000 or 5000 that left this since Sunday, at least two thousand will fall sick somewhere before three weeks are over. They ought to have accommodations for 2000 sick, at least, in Montreal and Quebec, as all the Cork and Liverpool passengers are half dead from starvation and want before embarking; and the least bowel complaint, (which is sure to come with change of food,) finishing them without a struggle. I never saw people so indifferent to life. They would continue in the same berth with a dead person until the seamen or captain dragged out the corpse with boat hooks.

"Good God! what evil will befall the city where they alight!—Hot weather will increase the evil.

"Now give the authorities of Quebec and Montreal fair warning from me. Public safety requires it."

Subsequently the Montreal Herald remarks: "Dr. Douglass's apprehensions are already fulfilled here."

In the alms house at Albany, one physician and four nurses have lately died of this disease, contracted in attending the patients.

Dr. McCormac, of the Belfast Hospital, in his chapter on fever, writes as follows:—

"Some would distinguish typhus from typhoid fever, confining the latter to large towns as Paris, and referring the former to the febris bellica or castrensis, and the Krigspest of the Germans. Lombard

---

and Gerhard insist largely on this, and affirm not merely that typhus and typhoid fever are distinct, but that the latter is not contagious, and that it presents exclusively the pustular alteration of the follicles or dothineritis, already signalized. No such distinction, however, subsists; all known varieties run into each other; every modification may present itself concurrently or successively in the same individual, and similar alterations are met with in all."—*Methodus Medendi*, p. 11.

Dr. McCormac then, believes in the identity of typhus and typhoid, and in the contagious nature of the malady. If we were to admit a distinction—a typhus and a typhoid fever—the one contagious and the other not so, how greatly would it modify our ideas of the extension of the malady. We see the diseases generated in the same manner, showing no difference except in energy of the exciting causes and the violence of their symptoms. Both ushered in by the same symptoms, and both in the end exhibiting the same anatomical characters—varying only, according to the violence of the disease. "Both are owing to impure air, uncleanness, over-fatigue, depressing passions, &c., &c., and display the same meteorism, abdominal tenderness—dry, red tongue—subsultus tendinum—stupor—delerium—deafness, cough, viscous expectoration, livid surface, foetid excretions, and petechiæ."—*Ibid*, p. 15.

If we are to consider typhus and typhoid, as one and the same disease, we must certainly admit its contagious character—and that it may be transmitted from person to person, and circulated in every direction by "houseless wanderers."

To what else are we to attribute the fatality in the family of Mr. Mead, and the many other instances which might be quoted? We think it doubtful, whether sporadic cases will produce epidemics—unless want and misery predispose. Slight fear, therefore, is to be entertained, that our cities or villages will be desolated by this disease—and while here and there individuals who are exposed to the contagion will fall victims to it, the character of our nation is such and the medical police of our towns and villages so well regulated as to ward off general diffusion of the disease.

With reference to the origin, causes, and mode of propagation of the fever of the present season, introduced into all our large sea-port towns by the emigrants from the old world—we hope before long to have full and satisfactory information, from a committee lately appointed by the New York Academy of Medicine. The committee

are directed, also, to enquire into its distinctive characters; its autopic phenomena—its statistics—and the course of treatment which has been attended with the most satisfactory results. The character of the gentlemen composing this committee leads us to look for a report which, will prove a most interesting document and valuable record, with reference to this disease.

When want, wretchedness and famine, combine to prepare poor mortality for the reception of its many ills, disease makes an easy prey of its victim. When we recollect the awful effect of typhus fever in Ireland, during the years 1740 and 1817, when the causes of the disease were not so powerful as they now are in that unhappy country—how terrible must be the amount of human suffering, and how great the desolation, consequent upon the present condition of the country. With these remarks on the character of the disease, we close our subject—hoping that persons who have the opportunity of observing this disease in our own State, will contribute to the stock of information we already possess with regard to it.

---

ARTICLE XLI.

*Report of the action of the Georgia Medical Society, on the Proceedings of the National Medical Convention.*

SAVANNAH, Sept., 1847.

To the Editor of the Southern Med. and Surg. Journal:

Dear Sir—At a meeting of the Georgia Medical Society, held on the 2d Sept., the enclosed Reports of the delegates of said Society to the late National Medical Convention, held in the city of Philadelphia, and the Reports of the several committees appointed by said Society to report upon the matter recommended by their delegates, were acted upon and unanimously adopted. By resolution of the Society, I have been instructed to forward them to you for publication in your Journal. Will you do us the honor to insert the same?

Very respectfully, your ob't serv't,

JOHNSTON B. TUFTS, M. D.,

Secretary G. M. S.

---

REPORT OF THE DELEGATES TO THE NATIONAL MEDICAL CONVENTION.—The undersigned, Delegates from the Georgia Medical Society to the National Medical Convention, held at Philadelphia, in May last, have the honor herewith to submit to the Society a copy of the minutes of that Convention, and the reports of the various committees, and also a revised edition of the minutes of the Convention of the preceding year, held at New York.



The undersigned cannot help congratulating the Society on the zeal and spirit which has caused its representation in these two Conventions, for they believe that those Conventions will have a wide spread influence on the future destinies of the Medical Profession throughout our land.

The action of both Conventions was eminently conservative. All the measures adopted were recommendatory, and will depend upon the moral action of the Profession of the whole country. Acting strictly for the good of the whole, they were entirely impartial as to any particular school.

It is not intended to give in this report a synopsis of the proceedings of the Conventions. A reference to the minutes will shew what these proceedings were.

But there are some subjects upon which, in order to carry out the views of the Conventions, it is necessary that the various Medical Societies of the Union should act.

These are specially the approbation or disapprobation of such Societies, as the American Medical Association which has been created, and the views of the Convention as to the preliminary education of Students of Medicine, and a general code of Medical ethics.

In relation to the recommendations of the Convention as to the requisites for graduation, it gives your delegates great pleasure to state that the Medical department of the University of Pennsylvania, an institution confessedly at the head of the Medical Colleges of the Union, has already responded by announcing, that their next term of lectures will commence on the 18th of October, and be continued until the last Saturday in March. This example of the oldest Medical institution of this country will no doubt prove of signal service to the cause of Medical education.

Nor can your delegates refrain from calling the attention of the Society to an important subject started by the Convention, which they believe will exercise a most beneficial influence—viz., a uniform system of Registration of the births, marriages and deaths, in the several states of the Union. As one of the undersigned (Dr. Arnold) is one of the special committee to whom the subject is referred, he begs to call the attention of the Society to it, as at the proper time he will invoke aid in order to induce the State of Georgia to adopt such a system.

With a view then to the deliberate action of the Society on the important matters which come within its range of power, the undersigned would respectfully recommend the adoption of the following resolutions:—

1. *Resolved*, That so much of the proceedings of the late National Medical Convention as relates to the organization of an American Medical Association, be referred to a special committee, with instructions to report at the next regular meeting of the Society.

2. *Resolved*, That so much of said proceedings as relate to the subject of preliminary education, be also referred to a special committee, with instructions to report at the next regular meeting.

3. *Resolved*, That so much of said proceedings as relate to a code of Medical ethics, be referred to a special committee, with instructions to report at the next regular meeting.

In conclusion, the undersigned beg leave to state, that the absence at the north of one of the delegates, (Dr. Tufts,) until the last three weeks, has prevented a report from having been previously made to the Society.

All of which is most respectfully submitted.

RICHARD D. ARNOLD, M. D. }  
JOHNSTON B. TUFTS, M. D. } *Delegates.*

Savannah, August 15th, 1847.

A true extract from the minutes.

JOHNSTON B. TUFTS, M. D.,  
*Secretary G. M. S.*

REPORT OF THE COMMITTEE UPON THE FIRST RESOLUTION RECOMMENDED BY DELEGATES.—Your Committee have with much pleasure and congeniality of feeling interchanged their opinions in relation to the immense and incalculable benefits that may result from the late organization of a National Medical Association, for the improvement and proper regulation of the Profession in the United States; and though little opportunity has been afforded them of reviewing the proceedings of the late Convention, yet as far as they have examined them, they approve very highly of the entire doings of that respectable body, both as regards the subject upon which we have been appointed to report, and other matters touching upon Medical conduct and education. All of which is respectfully submitted.

(Signed,) J. C. HABERSHAM, M. D., Ch'man. }  
W. G. BULLOCK, M. D. } *Committee.*  
W. A. KINNILLY, M. D. }

Savannah, Sept. 2, 1847.

A true extract from the minutes.

JOHNSTON B. TUFTS, M. D.,  
*Secretary G. M. S.*

REPORT OF THE COMMITTEE ON THE SECOND RESOLUTION RECOMMENDED BY DELEGATES.—The Committee appointed at the last meeting of the Society, to take into consideration the report of the Committee of the National Medical Convention on the subject of the Preliminary Education of Students, beg leave to report, that they have performed the duty assigned to them, to the best of their ability. That they have read attentively the report of the Committee of the Convention, which appears to have been drawn up with care, and proves that the subject assigned to them has received that serious and enlightened attention which it deserves.

The Committee of the Society believe with the Committee of the Convention, that there are many difficulties in the way of fixing the standard of preliminary education for Medical students, as high as would be desirable, or profitable to the student in after life; and they agree with the Committee of the Convention, that it is better at this time, to fix it a little too low, than too high—and to leave it to future Conventions gradually to advance it to that point, which will enable the student to enter upon the study of Medicine, a proficient in every branch of preliminary knowledge, which is requisite to render him an enlightened and accomplished physician.

The Committee of the Society therefore believe, that they can recommend with great confidence the report of the Committee of the Convention to the Society, for its adoption.

(Signed,) P. M. KOLLOCK, M. D.  
JOHN F. POSEY, M. D.  
THOS. STEWARDSON, M. D.

Savannah, Sept. 2, 1847.

A true extract from the minutes.

JOHNSTON B. TUFTS, M. D.,  
*Secretary G. M. S.*

REPORT OF THE COMMITTEE ON THE THIRD RESOLUTION RECOMMENDED BY DELEGATES.—The Committee to whom that portion of the report of the National Medical Convention, which relates to a code of Medical Ethics, and recommending that the Medical Profession in the United States should be governed by the same code, beg leave to report, that they have carefully examined the same, as well as the introduction thereto, and recommend its adoption to the Georgia Medical Society.

The system of Medical Ethics, which this Society now recognizes



is entirely too vague and incomprehensible, making the duties it imposes rather inferential than expressed. Constituted as man is, even with the clearest perception of what may be his relative duties, a well digested code for mutual government is essential to his well being; without such, no association can exist harmoniously. The intelligence of the Medical profession have long acknowledged this truth, and we believe on all occasions, have exhibited every anxiety to establish such rules for mutual government as would be most conducive to that end. Not having a common head from which a uniform and acceptable code of ethics could be disseminated, individual associations have adopted such as was deemed expedient for themselves. Much discrepancy, we lament to say, has thus arisen—so much so, that we doubt that the ethics of any two Societies could be found to accord.

The principles that a code of Medical Ethics inculcates, and which the experience of the profession believes necessary, we conceive, ought to be such as would admit of general adoption. These principles ought to be in themselves immutable, founded as they are on that first of christian apothegms—"Whatever ye would that men should do unto you, do ye even so unto them," and as such, are certainly worthy of general concurrence.

The code of Ethics, including the introduction submitted to us for consideration, we believe to comprehend all that is full and adequate, embracing within its specifications the essentials necessary to sustain the interest and dignity of the profession. We therefore cordially recommend the same to this Society for its adoption.

|           |                         |              |
|-----------|-------------------------|--------------|
| (Signed,) | C. P. RICHARDSON, M. D. | } Committee. |
|           | THOS. STEWARDSON, M. D. |              |
|           | A. H. BAILEY, M. D.     |              |
|           | JOHN F. POSEY, M. D.    |              |
|           | P. M. KOLLOCK, M. D.    | }            |

Savannah, Sept. 2, 1847.

A true extract from the minutes.

JOHNSTON B. TUFTS, M. D.,  
Secretary G. M. S.

## ARTICLE XLII.

*A Case of Glanders in the Human Subject.* Reported by L. A. DUGAS, M. D., Professor in the Medical College of Georgia.

The disease termed Glanders or Farcy, hitherto regarded as peculiar to equine animals, has been of late years ascertained to be communicable to man, and has therefore attracted much attention, especially in England and France. In our country the subject has been comparatively neglected. The following case is reported rather for the purpose of awakening the profession to this new source of human suffering, than from any intrinsic peculiarity in its history.

Peter Walker, the subject of this notice, was an old negro man, (about 75 years of age,) engaged in driving a dray for the last forty years. During this time he always had charge of his own horse, and enjoyed fine health, with the exception of "tremor senilis," or the "Shaking Palsy," as it is commonly called, with which he had been afflicted for a few years. Requested to visit him on the 1st of August last, I found that he had been suffering about a week with pains in his limbs, which he believed to be rheumatic; that three or four days prior to my visit he had a severe ague, followed by a smart fever, which still continued with little or no remission; that he had not had an alvine evacuation for six or seven days; and that for the last three days his pains seemed to be seated principally in the calf of each leg and in the biceps flexor cubiti of each arm, all of which regions presented a swelling of circular form, from three to five inches in diameter, gradually extending, and exquisitely sensitive to the touch. On examining these, I found them glossy, occupying the skin and cellular tissue down to the muscles, which seemed to be about an inch below the skin at these places. The cellular tissue for several inches around the swelling was edematous, forming a pit when pressed upon with the finger. The natural hue of the skin masked any redness that may have existed. Although the patient and his wife regarded these as "large boils," they presented no such appearance and did not at first seem to suppurate, but resembled large carbuncles. Indeed, had it not been for their number, and other circumstances, they might have been mistaken for such.

Never having seen a case of human glanders before, I felt at a loss in making out the diagnosis, and prescribed *cold* poultices in place of the warm, a cathartic of jalap and cream of tartar immedi-

ately, and quinine to be taken the ensuing morning in order to modify the fever, if it belonged to the type of our remittents.

On the 2d August I found my patient more comfortable; his bowels had been well emptied, and his fever was less intense; but the local tumefactions were about the same as before, perhaps a little larger. Sulphate of quinine ordered again for the next morning. Diagnosis still uncertain.

3d August. Fever still continues—not modified by the quinine. Tumors in about the same state—not enlarged, yet very painful: new ones about an inch in diameter making their appearance about the arms and legs, but not in the course of the lymphatic trunks—no enlargement of the axillary nor inguinal glands—muscular strength, very much impaired from the first, is becoming more so. Unable still to form any certain diagnosis, I now suspected this might be a case of Glanders, and accordingly requested several of my pupils to see it, and to watch its progress. It is unnecessary to note the symptoms from day to day. Suffice it to say that the tumefactions gradually increased in number from the elbows to the shoulders and from the dorsum of the feet to the knees, then invaded the back of the hands, the forearms and the thighs. Neither of these, however, attained the size of the original four, but varied from one to two inches in diameter; nor did they penetrate so deeply into the tissues: the one upon the calf of the left leg became the seat of a pustule, which opened and continued discharging a very considerable quantity of thin sanious matter; the one upon the left arm assumed the appearance of phlegmonous erysipelas, pus being extensively diffused about the belly of the flexor muscle. A similar state of things existed on the anterior surface of one tibia. On the 5th August, one of these tumors appeared on the forehead, and another near the inner canthus of the eye, both of which rapidly met, ulcerated and discharged sanious matter—small white pustules occurred also upon the side of the neck. It is worthy of remark, that nothing of the kind manifested itself about any part of the trunk—nor was there any abnormal discharge from the nostrils. The patient had a slight catarrhal cough, but was subject to it, prior to this attack. The fever continued, the tongue became dry and of a dark brown color, the thirst was incessant, the pains harrassing, and the prostration increased. Diarrhœa supervened, the mind wandered, urine and alvine discharges passed off unconsciously, and finally stupor closed the scene on the 9th of the month.



During the progress of the case various applications were made to the tumefactions, without relief. As the purulent collections occurred after the case had attained a hopeless aspect, they were not opened. The internal medication was restricted to palliatives, after the first few days of my attendance.

Viewing the case as one of Glanders, I naturally felt a desire to ascertain the condition of the horse in Peter's charge, and on calling the day after the old man's death, was told by Mr. H. (on whose lot Peter resided) that the horse had the glanders, and that he (Mr. H.) had advised Peter not to buy him lest he might catch the disease, as he had just been reading an account of its contagiousness in a newspaper. Other neighbors testify that the horse "was glandered" when Peter bought him, which was about six months before. On examining the horse I found that he had a copious discharge from the nostrils, but no tumors about the jaws or neck, as is frequently, though not always the case.

That the contagiousness of Glanders among horses is by no means so great as has been generally supposed, has been established by observations made at the extensive Veterinary school of Alfort, in France, only a few, out of one hundred who were exposed to it, having contracted the disease. Whilst the disease is not very readily communicated through the atmospheric medium, such is not the case when the matter or purulent discharge is brought in contact with the tissues, and especially if these be denuded. This may account for the fact that so few grooms take the disease, and that Peter nursed his horse six months before he became affected. He probably became inoculated by the contact of the discharge with some abraded portion of his surface.

The general features and termination of the above case accord with those reported by the French and English writers. This acute form has always terminated fatally. It may be communicated from man to man; hence those who nurse the sick of this dreadful disease cannot be too careful to avoid inoculation when dressing the ulcers.

Those who may desire to investigate the subject will find it treated of in Tweedie's Library of Practical Medicine, Copland's Dictionary, The Dictionnaire de Médecine, The Cyclopaedia of Practical Medicine, &c.

## ARTICLE XLIII.

*Penetrating and Lacerated Wound of the Abdomen—cured.* By  
G. M. TUTT, M. D., of Columbia County, Georgia.

On the 27th of last June, I was called in great haste to see a boy belonging to A. P. R., Esq., of this county, who had been gored by a cow. I arrived in three hours after the accident. The patient was eight years old; was suffering excruciating pain; and upon examination I found the horn of the animal had penetrated the abdomen in the right iliac region, quite near the external iliac and epigastric arteries. A considerable portion of the intestines had protruded through the wound. They were so distended with gas that I could not return them by taxis, and with a probe pointed bistoury I made an incision upwards and outwards, thus enlarging the lacerated opening in the abdomen. Observing no wound in the viscera, they were now carefully restored, and the little patient soon fell asleep. Before applying the dressings, I could distinguish the arteries of this region, and the spermatic cord entering the abdomen. The wound was dressed with interrupted sutures, compresses and bandages—Dr. Thomas having arrived and assisted in their application. The patient being put to bed, an injection not moving his bowels, a saline purgative was administered, and he had several alvine evacuations by the next morning.

June 28th.—The patient had slept well. He has considerable tenderness of the abdomen, with some tympanites; pulse 85; skin moist. Prescribed leeches to abdomen, gruel and elm water.

29th.—Has fever, pulse 100; skin is dry and harsh. The patient complains of pain on touching the abdomen; the tongue is red; has thirst. Bled him to fainting; gave laxative; leeches to be applied again—diet, diluent drinks alone.

July 1st.—The fever has abated; pulse is 80; skin is moist; tympanites and tenderness of abdomen relieved. Patient has some appetite. Bowels are in a good state. Diet, the same.

July 4th.—Found patient still improving. Dressed the wound, which had united by the first intention. Ordered a more generous diet.

July 8th.—The patient walking about with a soft leather bandage adapted to the iliac region over the cicatrix.

The weather during the treatment of this case was very warm.

---

## ARTICLE XLIV.

*The Strawberry Leaf—a valuable auxiliary in the treatment of Chronic Dysentery.* By J. C. C. BLACKBURN, M. D., of Barnesville, Georgia.

Believing that a discovery, however simple, which has a tendency to alleviate the sufferings of man, should be given without reserve to the medical world, I feel disposed to present to its consideration the claims of the Wild Strawberry. For the last three years I have been endeavoring to analyze this plant, and to try, if possible, to arrive at its medicinal properties. I was led to this investigation from the mere casual fact of seeing a dog that was apparently in severe pain, swallowing its leaves.—And just here let me add, that if physicians would more frequently lend an observing eye to the conduct of the brute creation, when afflicted with diseases peculiar to them, they might find remedies for diseases which though at present obtainable, yet remain undiscovered. I have used the strawberry leaves in every form for the cure of dysentery; but the formula most desirable is as follows: R. ℞ 1 of the Green Leaves, add to them qt. 1 of good French Brandy, and boil to one pint. Give of the strained liquor one table-spoonful every three hours, until the disease in question be relieved of its distressing symptoms. I will here add *one case*, the origin of which I am totally ignorant.

Mr. B., a volunteer returned from Mexico, was taken with dysentery at Matamoras last August a year ago. He was placed under the direction of the Surgeon to the Georgia Regiment, who attended him until he pronounced his case incurable. The patient afterwards recovered sufficient strength to accompany the regiment to Monterey, and thence to Vera Cruz, where he was again prostrated by this disease. He reached home last July, with a constitution almost broken down, and placed himself under my care. I resorted to the use of every agent within my knowledge for the cure of his disease, but without success. I at length determined to try the strawberry leaves, as in the formula above-mentioned. He had not taken but ten spoonfuls when he commenced to improve, and speedily recovered. He is now *entirely cured*, and able to attend to the duties of his calling. I have used the strawberry leaves in many cases since, with the same happy result.



## PART II.—REVIEWS AND EXTRACTS.

## ARTICLE XLV.

*The London Lancet.* By the Editor, at Portsmouth, England,  
August 5th, 1847.

Having been compelled through domestic affliction to leave home, and unexpectedly detained in this place by the non-arrival of a New York packet ship on board of which my family sailed for Europe, I propose to employ the time by briefly noticing the July Nos. of the above-mentioned medical periodical. The *London Lancet* has long been known as one of the most useful journals published in the world. Under the editorial management of Mr. Wakeley, Surgeon, Member of Parliament and Coroner for a large portion of London for years, (Middlesex,) it has acquired a reputation second to none in Great Britain. The *Lancet* is now read in every quarter of the globe—an American edition has for some time been issued in our own country. It is published every Saturday, and in addition to its common title, embraces Journal of British and Foreign Medical and Chemical Science, Criticism, Literature and News. Within the few past months, Dr. Henry Bennet, favorably known by his writings on Diseases of the Neck of the Uterus, has been associated as junior Editor in conducting this Journal.

Each No. contains 28 pages of double column of closely printed matter, and two volumes are thus constituted in a year.

The leading article in each of the Nos. before us is the translation, by Dr. Goodfellow, of a course of Lectures on the Physical Phenomena of Living Bodies, delivered in the University of Pisa, Italy, by Prof. Matteucci, F. R. S. These lectures are of such a minute and elaborate character as to prevent an analysis or review of them. They are certainly distinguished by great erudition and research, and the learned author clearly evinces a perfect familiarity with the important subjects which have engaged his attention.

As it is not proposed to notice every article, we proceed to extract or collate those deemed most useful and interesting to our readers. The first we make is from an alphabetical notice of subjects connected with the treatment of *Dyspepsia*, by Robert Dick, M. D. Under the head of *Diet*, he remarks—

“It is obvious that this is a matter far too general and generic to form the subject of a single ‘notice.’ It would itself furnish materials

for a *series* of alphabetical notices as long as those we are now engaged in. I propose, under the present head, to give (as entertaining, and not devoid of useful information) some details of the diet of the Greeks and Romans, collated from materials collected by me more than ten years ago. I mention this circumstance, because a year or two ago, another medical gentleman of London published a work, in which he touches to some extent, on the same subject.

"The Greeks and Romans, it is hardly necessary to say, used no alcoholic liquor, nor yet tea, coffee, chocolate, or sugar. It is extraordinary, also, that even butter seems to have been most uncommon among them, Galen informing us that he had but once in his life seen it. They were ignorant also of the greater number of our tropical spices—cloves, nutmegs, ginger, Jamaica and cayenne pepper, mace, pimento, &c. They knew nothing of spinach, sago, tapioca, arrow-root, or of the potato; nor, among fruits, of the orange. When we add that they were also unacquainted with tobacco, we perceive that several articles, staple among us, were unknown to them.

"Beef was the ordinary principal article of food with the early Greeks and Romans. This, if not eaten raw, was hastily broiled or roasted, and, in later times at least, strongly spiced. The flesh of the sow and the wild boar, as being supposed most nearly to resemble human, was considered peculiarly nourishing; Athletes, when training for the amphitheatre, consequently preferred this species of flesh. The ancients made use of several kinds both of vegetables and animal food which we do not employ. Thus they ate mallows, acorns, and lupins, while radish, lettuce, and sorrel, they used more than we do. As regards kinds of animal food not in use among us, but employed by them, may be enumerated, the flesh of the wild ass, young dogs, dormice, foxes, bears, parroquets, lizards. The dormouse was eaten before its winter sleep; when fat, was esteemed a great luxury, and was served up with honey and grains of poppy. Dogs intended to be eaten were previously castrated, with the view at once of causing them to grow fat, and to prevent their having a strong odour.

"The Romans also maintained large aviaries. The peacock was much esteemed as an article of food both by the Greeks and Romans. The ostrich, though forming tough eating, was prized, but its wing and brain were reckoned the select parts. For one dish of ostrich brains, 300 in number, the emperor Heliogabalus was at an expense equal to 30,000*l.* sterling. The crane and the swan made fashionable dishes at Rome till Augustin's time; then the stork succeeded. Young cocks which had been drowned in Falernian wine, (the most esteemed wine of that time,) and afterwards macerated in it, were reckoned a luxury; the liver of the goose, made into a paste with milk and figs, was an invention of the consul Metellus, and obtained repute; the thrush and the blackbird were, by the ancient Romans, as by the modern Italians, particularly prized; in the bills of fare in the Roman eating houses, they still appear, and the writer can bear testimony to the excellency of the dish: the Romans kept them in

large aviaries, and fed them with wheat in ear, figs, and flour. The lark and the becafigo, a small bird, still used in Italy, were anciently much employed. They did not use frogs, though, as we have said, they ate lizards.

“In the earlier ages of Greece and Rome, fish were considered an effeminate sort of food; but at a later period, they became a principal part of the diet of fashionable Romans, and immense expense was lavished in procuring and maintaining them. Sometimes single fishes were sold at a greater price than the cost of a slave. The herring, cod, and, I rather think, the salmon, were unknown or unused by the ancient Romans; but the fresh-water lamprey brought immense sums; the sturgeon was thought worthy of the tables of the emperors and noblest Romans, and was always served up with great pomp. The eel called *murena helena*, and the Conger eel, were greatly used; the liver of the whiting was greatly prized, and its flesh thought next in rank after that of the sturgeon; the turbot, flounder, plaice, sole, and what is called the sea-sparrow, were thought excellent dishes. Freedmen only were allowed to eat the flounder, and it and the sole were regarded as the fishes most easy of digestion. The mackarel and tunny were much sought after, and were eaten with rue and assafœtida. But the roach or mullet would appear to have been regarded as the *facile princeps*—the *ne plus ultra* of Roman luxury. As they did not succeed in rearing it in their reservoirs, it sold at an extravagant price. Three cost about 25*l*. The liver and head were esteemed the most. It was from this fish that Apicius compounded his celebrated sauce. I do not find what was the fish for which the epicure just named made his voyage to Africa, and am not aware if it has been ascertained.\* The anchovy was used, as it now is in Italy, pickled in vinegar. It was then considered a delicacy—an opinion which any one who has eaten it in Leghorn or Genoa, along with a flask of good wine, will not be slow to believe.

“Pottages or soups were used but little by the Romans.

“Finally, as regards condiments and wines. In general their dishes were greatly spiced. Almost every dish was impregnated with rue, coriander, cumin, myrtle, privet-berries, fennel, smallage, spikenard, leaves of the laurel, cassia and of asarabacca, sumach, elder, mastic, fenugreek, onion, leeks, cresses, rochet, the Egyptian plant called seseli. To common salt they often added nitre and sal ammoniac, and to their sugar confections they added pepper.

“The wines of Scio, Lisbon, Tarentum, and Falernia, were most esteemed. They were often drunk by the Greeks and Romans, mixed with warm water, as this was thought to develop better their flavour. They also impregnated their wines with absinthia, roses, pennyroyal, myrrh, rosin. They also added honey to wine, and had wines diluted

\* I need not inform the reader that this was the man who committed suicide from a fear of wanting means of gastronomic indulgence. When he did so, he had still a fortune of 80,000*l*, but it was originally much greater.



with barley and white of egg. To prepared wine they occasionally added raisins or the juice of the fresh grape. They had also an acidified milk as a drink. Iced and hot water for mixing with wine were sold in shops corresponding to our ale-shops.

“What were called voleries were extremely numerous (as we are informed by Varro and Columella) in the vicinity of Rome. In these were reared and fattened, thrushes, blackbirds, ortolans, quail's, &c. What is singular, oxen and hogs were fed on the excrements of these birds. Each fat thrush cost about two shillings—a large sum. They were fattened on millet and on a paste formed from flour, mixed with bruised figs; and the flavour of their flesh was raised by supplying them with the berries of the ivy, myrtle, and lentiscus. As may be seen in some of the bird enclosures in the Zoological Gardens, Regent's park, they were supplied with water by means of a little stream running through in a stone gutter. Although light was admitted to these voleries, yet a prospect of the fields, &c. was carefully prevented, in order that the feathered prisoners might not be agitated by a view of their familiar and natural haunts, but fatten in lazy content.”

*Ether Inhalation in Hysteria.*—Mr. Wilcolnson, of Lincolnshire, relates, that having been called to a female aged 29, labouring under hysteria for six years, with great irritation of the spinal marrow, attended at times with clonic spasms—the fingers and toes permanently contracted; he had recourse to the inhalation of ether. In one minute she was composed, and in another all spasmodic action was arrested. Sleep ensued and continued for eight hours. She had, however, a recurrence two or three days afterwards, but which was likewise speedily subdued by the ether.

*Rupture of the Sclerotica and Iris.*—Mr. Wollastan was called to see a boy 13 years old, struck on the eye by a piece of a glass bottle shivered to pieces against a stone. The sclerotica was found to be ruptured to the extent of  $\frac{1}{4}$  of an inch, and the iris completely divided; the pupil was triangular in shape, much contracted, and vision very indistinct; the conjunctiva was not cut, but there was slight effusion of blood in the anterior chamber. Treatment adopted—leeches, calomel, black draught with salts, rest in bed, and the eye covered with a shade during the day. In a month the fissures in the sclerotica and iris healed, the pupil was oblong in shape, and vision nearly restored.

*Nature of the Membrana Decidua.* Academy of Sciences.—“A NOTE was read by M. Coste on the nature of the decidua formed around the ovum in the human subject. He first alludes to the hypothesis now generally looked upon as the right one—viz., that the cavity of the uterus becomes, after impregnation, completely lined by a membrana decidua, thrown out from its mucous membrane; that the ovum, on arriving at the opening of the Fallopian tube into the uterine cavity, can only proceed in its course by pushing this first-

formed membrane—the decidua vera—before it, and so inverting a portion of it, by which it will surround itself with another tunic, which, according to this view of its formation, is called decidua reflexa, the two retaining the ovum in its position, and holding between them the hydropericonic liquid. M. Coste then goes on to say, that several facts for a long time led him to doubt the foregoing theory of the deciduas, but that he was disinclined to call it in question openly, until he had made such careful investigations as to convince himself of its error, and such as might lead him to the truth. With these objects he has opened a great number of the bodies of women who have committed suicide, and after several years' experience, he believes he has collected such decisive observations on gestation in the human species, as to remove all doubts from any subject connected with it. He announces this present paper as the first of a series detailing the results of his researches. The present note conveys his views respecting the entry of the impregnated ovum into the uterus, and the formation of the decidual membranes.

“There is never produced normally in the womb of the human female, neither before nor during gestation, any false membrane, or hydropericonic fluid, and, consequently, the deciduous membranes, as represented, are purely ideal.

“The ovum freely traverses the Fallopian tubes, and penetrates at once into the uterine cavity, and is brought into immediate contact with the hypertrophied mucous membrane, depressing it at the point where the placenta is hereafter to be developed; and the mucous membrane itself, influenced by the action the ovum sets up in it, swells and rises as a prominent ring around it, or as a circular fold, which at length covers over and encloses it, constituting what has been named the decidua reflexa. As this coat, according to my observations, is a prolongation of the uterine mucous membrane, it has, at the first, the same structure as it. It is glandular and vascular in all its extent, like the mucous membrane. Later, however, all these traces of organization fade and disappear, but their existence may be very readily recognised in utero during the first month of gestation. I have several specimens in my collection which leave no doubt on this matter. We may also remark, on the most prominent point of the reflected layer, a sort of cicatrix or umbilical depression, which indicates the spot where the circular fold of the uterine mucous membrane to envelope the ovum, was effected.

“This then, in the human species, has no relation, except with the mucous membrane of the uterus; and when, in cases of abortion, or after parturition, the ovum is expelled, it is the exfoliated mucous membrane which it carries away with it. The results which I have just made known differ so much from the views generally received, that I determined not to expose myself to their responsibility, until the facts had become irresistible. I now offer them confidently and am persuaded that if no one as yet has been able to explain the problem, it has arisen from the difficulty of procuring wombs in an early stage after impregnation.’

"In conclusion, M. Coste observes, that he is not alone in his belief of the error of the present opinion respecting the early history of the ovum, since Dr. Sharpey too partakes in it; and that the latter has proposed two explanations, one of which may readily be reconciled with his own views.

"And the séance following the one on which the preceding paper was read, a communication was received, calling attention to the fact that in M. Valentin's Report on the Progress of Physiology, it was mentioned that M. Poppenheim also was opposed to the received opinion regarding the ovum and its membranes."

*Mode of providing a wet nurse on an emergency.*—Dr. McWilliam, in his report, says, the inhabitants of Bona Vista (Cape de Verde Islands) employ a decoction of the leaves of the *iatropa curcas* to the mammæ, and suction of the nipple. We saw a copious flow of milk produced by these means, on the fifth day, in a woman who had not nursed, and in whose breasts there had been no milk for twenty months.

[We believe any woman within the age of childbearing, by fomentations and suctions of the nipple, if persevered in, would give milk.—Edr.]

*A Physician's duty to his Brethren and Quacks.*—"Physicians are aware of the great difficulties and uncertainties in their art; they must be sensible of frequent errors on their own parts; how indulgent, then, should they be towards the mistakes of others. If there is a sight calculated to excite pity mingled with disgust, it is to see medical men judging of each other with harshness and severity; thinking by oppressing others they do so much to elevate themselves. Avoid, especially, such a course as this; respect the opinion of those who have at least as good opportunities of acquiring medical knowledge as yourselves; cultivate their friendship; draw closer the bonds of catholic brotherhood: so will you be spared the miseries and vexations of petty warfare, and enjoy self-respect and the respect of others.

"By these remarks, I do not wish to be understood that you are to deal tenderly with quacks and quackery. As woe was denounced against Scribes and Pharisees—hypocrites, so must woe now be proclaimed against empirics—the basest of hypocrites and imposters. Our duty to the community, a regard to the greatest good of the greatest number, demands the exposure and denunciation of medical imposture and deception, whatever garb they may assume, or livery they may put on."

We give what we think a well established *Case of Interstitial Uterine Pregnancy*.

"The *Révue Médicale* contains an original communication of a case of interstitial uterine pregnancy, terminating fatally, by Dr. Payan, surgeon of the Hôtel Dieu d'Aix. There was this point, in addition to the rarity of it, interesting in the case—viz., that from



the sudden death of the woman, without any obvious cause, a judicial inquiry was made, and a post-mortem examination, which revealed the true nature of the case:—

“A woman, unmarried, aged thirty-two; strong and robust; mother of one child; and one used to active exercise in carrying messages, &c.; for different people of the town; had now gone three months in pregnancy. After having been partaking of a feast with a paramour during the day, she felt unwell in the evening, and was seized with violent pains in the hypogastric region, with excessive thirst and great prostration. She retired to bed, hoping to gain ease; but this failing, she sent for a practitioner, who applied leeches over the pubic region. But this was without effect: her state became worse; she grew more and more pale; her pulse became gradually feebler, and her vision obscured. Frequent syncope, moreover, occurred, and two hours after the onset of the attack, she expired.

“Her death being looked upon with some suspicion, three physicians were commissioned to make an examination of the body. Nothing appeared on the surface of the body. The abdomen being opened, a large quantity of blood, mixed with the serum of the cavity, was found in the peritoneal sac; and towards the hypogastric region, the blood occurred in large clots, entirely covering the uterus. These clots being removed, the uterus was ascertained to be increased in size; but what was most remarkable, was a prominence situated at its upper part, representing in the greater part of its extent, a diaphanous wall, through which an embryo could be perceived, and which was consequently out of its normal position. The suspicion excited among those present was, that an attempt at procuring abortion had been made, which had thrust the embryo from its natural situation. With this idea in their mind, the examination was proceeded with, by the removal of the anterior portion of the pelvis, along with the internal and external organs of generation, and the bladder and rectum. An incision was then made through the symphysis pubis, and then traversing the wall of the urethra and bladder; but no traces of injury could be found. The vagina was opened, with no other result. The os and cervix uteri were so far dilated, or extensible, as to admit the little finger. The neck and body of the uterus being opened, some reddish-brown patches, of little extent, were noticed; but no solution of continuity. The uterus was developed to the degree met with in the third month of gestation, but its cavity contained no foetus. It was lined throughout by a kind of false membrane, incompletely organized, in the form of a concrete matter of considerable thickness, as a sort of soft, mucous, grey coat; not a drop of blood was discovered in the uterus. Connected with the uterine cavity, near its fundus, on the left side, and in the neighborhood of the uterine opening, of the Fallopian tubes, was another sac, formed in the substance of the uterus. Into this accidental cavity the left Fallopian tube seemed to open. There appeared no communication between the true uterine cavity and this false interstitial one. The

wall of the latter, by the inward pressure exerted, was very thin and translucent, looking like a mere fold of peritoneum, although, its structure being traced, its origin at the expense of the uterine substance was cognizable. In this secondary cavity, the entire fœtus, with its placenta, was lodged. It had the usual size of one at the third month—was of the male sex, free from all lesion, and attached by an umbilical cord to a placenta seated above and behind it. The hæmorrhage in the peritonæal cavity was accounted for by a rupture of the sac having taken place.

“It was endeavored to set up another view of this case, involving some parties in guilt for attempting to bring about abortion. The interpretation of appearances, by the view just alluded to, was, that a foreign body, as a sound, had been introduced, by the aid of a speculum, between the wall of the uterus and the fœtal membranes, and pushed on to the fundus of the uterus, so as to produce there a perforation; that by this perforation, the womb was excited to contraction, and that such contractions drove the fœtus from its cavity through the perforation; that what was regarded as a cyst, containing the fœtus, and derivable from the uterine wall, was no other than the ovum, with its membranes, attached to the surface of the uterus by the clots of blood, &c. This view, it was pretended, was upheld by some reddish spots about the orifice of the vagina, (but which were evidently of old date,) and towards the neck of the uterus; by the possibility of introducing the little finger through the os uteri; and from the capacity of the womb being deemed greater than it would be if it had contained nothing. But the last is no objection, since the uterus is known to augment in volume in all cases of extra-uterine fœtation; and the other objections also are groundless; for the laxity of the os uteri is explicable from the hæmorrhage; the spots on the vagina were old; and those on the uterus offered no trace of abrasion. Lastly, the appearances met with were not explicable by this forced hypothesis.”

*The mode of administering the Ether.*—Dr. Morton, in a letter addressed to the editor of the *Lancet*, says, “I have never been satisfied with any apparatus for the purpose of inhalation. I have abandoned my old inhaler, and substituted a sponge as large as the open hand or a little larger, and concave, to suit over the nose and mouth. Saturated with ether, this sponge is applied to the nose and mouth, and the patient directed to inhale as fully and freely as possible.”

*Death of Pariset*, well known as the Secretary of the Royal Academy of Medicine.

*Erysipelas following Vaccination.*—Mr. Forgarty condemns the practice of making numerous punctures when vaccination is performed. He is now attending two cases of erysipelas from this cause, in infants, and knows a case which terminated fatally. One genuine vesicle in vaccination is as efficacious as a dozen—there is then no necessity for several punctures.

*New method of procuring insensibility under operations.*—M. Duros has proposed to the Academy of Sciences, the employment of the electro-magnetic current. Individuals who have been subjected to this agent remained insensible to pricking or pinching at all parts of the body; and teeth have been extracted without their knowledge.

*Ether in Surgical Operations.*—M. Roux has recently performed Lithotomy in two cases, wherein the ether succeeded admirably. He has used ethereal inhalation in *one hundred and forty-three cases*, and never met with an accident from it.

*Successor of Lisfranc at La Pitié Hospital*—M. Laugier, formerly of Hopital Beaujon.

*“The Function of Generation.*—Nothing is better authenticated than the fact that conception may take place during menstruation. Professor Naeglé recommends intercourse even during the menstrual flow in cases of sterility.”

“We lay it down as an axiom—that no man having a *conscience* would ever prescribe, order, or suggest, medicine for a sick person, without a professional education, be he meddling friend, quack, or chemist.”

*Honors conferred on Medical men.*—Besides Baron Flourens, in the Chamber of Peers of France, and M. Bouillaud, in the Chamber of Deputies, M. Malgaigne has recently been elected deputy from one of the wards of Paris.

*Inflammation and Ulceration of the Neck of the Uterus in the Virgin Female.*—Passing over several other articles, some of much interest, while others appertain alone to the British medical public, we close this notice of the *Lancet*, by a short review of a paper by Dr. Bennet, the junior editor. It has already been remarked that Dr. B. having enjoyed extraordinary opportunities as *Interne* for several years in the Hospitals of Paris, has recently been engaged in publishing his observations on Diseases of the Neck of the Uterus. Since his return home to London, he has been made Obstetric Physician to the Western General Dispensary, &c. Two years ago, he published a Treatise on Inflammation of the Cervix Uteri; last March appeared an Essay on Inflammation and Ulceration of the Uterine Neck in women who have ceased to menstruate; and the present article completes his work by a notice of the affections of this same organ in the virgin state.

Dr. Bennet commences his paper by stating that opportunities for investigating the cervix uteri in virgin females, as a matter of course, have not been extensive. It has even been doubted, whether inflammation of this part is frequent in them. The experience of the last few years has, however, convinced him that not only inflammation but ulceration of the cervix is not an uncommon occurrence in the virgin. As physician accoucheur to one of the largest dispensaries in



London, good opportunities have been improved of observing the ailments of young unmarried females, and thus has been ascertained in a positive manner, that both inflammation and ulceration of the uterine neck, in the virgin, are occasionally met with. No physical examination ought ever to be thought of in the unmarried female, without the physician is morally certain that severe disease exists in the vagina or womb. The symptoms declaring this condition to exist, Dr. B. thus describes—

“The current ideas respecting the white vaginal or the leucorrhœal discharges of females, those which are found in our most recent classical writers on female diseases, are, in my opinion, decidedly erroneous. A white vaginal discharge is not, I believe, either the result of general debility or local weakness, or solely produced by inflammation of the mucous follicles of the uterine neck, but the result of congestion of the mucous membrane, lining the vagina and covering the cervix. Thus, this white secretion is frequently, if not generally, observed, in more or less abundance, during the entire duration of pregnancy, when the mucous surfaces alluded to are gorged with blood, and that in the absence of all inflammatory action. With many females, also, it occurs throughout their entire uterine life, a few days before and after menstruation—that is, whilst the physiological molimen hæmorrhagicum is present. I likewise nearly invariably find it co-existing with ulcerative inflammation of the cervix uteri, and it is then apparently secreted by the congested mucous membrane which extends beyond the ulcerated surfaces. The liability to these white, temporary, periodical fluxes,—in a word, to simple leucorrhœa,—is certainly greater in females of lax lymphatic constitution, and of weak health; but we must also recollect that these are precisely the females who suffer the most from disordered functional activity generally, and in whom menstruation is the most apt to be deranged in plus or in minus—thus giving rise to the uterine congestion, which I believe to precede and accompany simple leucorrhœa.

“When a leucorrhœal discharge is merely the result of the physiological congestion which accompanies menstruation, it does not last during the entire monthly period, or if it does, for ten days, a fortnight, or more, it is scarcely perceptible. Its existence does not either appear to me to exercise any very perceptible influence over the health of the individual. Thousands of women, especially in towns, have more or less leucorrhœa, for a few days, before and after their menses, during all their uterine life, without their health suffering, and without their thinking of applying for medical relief. Lastly, when this, the simple transient leucorrhœa alone exists, the only symptoms present are, a sensation of pelvic and vaginal heat and fulness, and sometimes, during the menses, the uterine and dorsal pains which characterize dysmenorrhœa.

“When there is not merely congestion, but inflammation, and especially if there is ulceration, then the white leucorrhœal discharge is not limited to the period before and after menstruation. It is per-

*manent*, because the presence of inflammatory ulceration keeps up a continued state of congestion in the surrounding tissues. In these cases, the 'whites' may be mixed with an abundant muco-purulent secretion from the ulcerated or inflamed surfaces, and then the discharge is yellow. But if the muco-pus is sparingly secreted, it will often be lost in the whites, and the latter only will be perceptible. The nature of the discharge is, therefore, no true criterion. This is the more true, as in limited ulcerative inflammation of the cervix, in virgins as well as in married women, there may be very little fluid secreted by the ulcers, either of one kind or another, and that little may be *completely* absorbed by the surrounding tissues, so that no discharge is observed. To resume: a yellow purulent discharge indicates inflammation, and, probably, ulceration; a *permanent* white vaginal discharge is also a very suspicious circumstance, as it proves, not the existence of general or local weakness, but permanent uterine congestion—a condition which, generally speaking, is connected with the inflammation and ulceration of the cervix, and which, even if it did exist alone, would soon be followed by such disease. On the other hand, the absence of either a permanent yellow or a white discharge is no proof that inflammatory ulceration may not exist.

"In inflammatory ulceration of the cervix there are, nearly always, local pains, and they constitute a much more valuable symptom than the vaginal discharge. These pains are situated in the ovarian regions, especially the left, and in the sacral and suspubic regions; such is the order of their frequency. They persist *throughout the entire interval* of menstruation, although they are, generally speaking, much the most severe during its existence. As there may be much pain in all these regions during menstruation, independently of any local inflammation or ulceration, it is only by what occurs during the interval of the menstrual molimen hæmorrhagicum, that we can judge of the existence or absence of ulceration.

"The uterus is sometimes low; being congested and voluminous, it falls lower in the vagina than is natural, and then there is a feeling of weight and bearing-down. As, however, the vagina is very contractile in the virgin female, and gives considerable support to the uterus, prolapsus is generally prevented taking place. This change of position of the uterus would, indeed, seldom be observed, were it not that the vagina sometimes gradually becomes relaxed, and loses its tone, from the combined effects of inflammation and congestion. Owing to this natural tonicity and contractility of the vagina in young females, the presence of the feelings indicating partial uterine prolapsus is therefore a very strong presumption that the patient has been suffering from long-continued inflammatory action. In such instances, the pessaries and other local means of support, which are now not unfrequently blindly resorted to, are necessarily attended with the most disastrous results, and generally aggravate the inflammation to an extreme extent. One of the cases which I have to narrate will painfully illustrate this assertion.

"In many of the cases that I have seen of ulceration in the virgin female, the most prominent symptom has been dysmenorrhœa carried to an extreme degree. Indeed, as I have already stated, I am convinced that many of the cases of extreme and obstinate dysmenorrhœa, which are at last considered hopeless, and merely palliated by narcotics, will be found, on careful scrutiny, to be cases of ulcerative inflammation of the uterine neck.

"Some females suffer great uterine pain during menstruation, from the very commencement of the functions. It would seem as if, with them, the physiological congestion which is inseparably connected with menstruation, could not take place without great pain being experienced. This may be either from the uterus being naturally morbidly susceptible to the stimulation occasioned by the presence of blood, or it may be that the monthly congestion is morbidly great. Whatever be the explanation of this fact, I have ascertained by long and careful observation, that these females are peculiarly liable to uterine inflammation, and it is principally among them that I have found the cases of inflammation of the cervix that I have observed in the virgin.

"When the cervix is inflamed and ulcerated, whether the menses have previously been easy or difficult, they generally become painful, sometimes agonizingly so, all the local pains above enumerated being much exaggerated, and extreme cutaneous tenderness being often experienced over the lower part of the abdomen, and sometimes all over the pelvis and thighs. From what I have stated, however, it will be evident that it is not the existence of pain during menstruation that indicates the presence of ulcerative disease, some women always suffering pain, even in the absence of uterine inflammation, but the presence of pain, when it did not previously exist, and its increase when it did. In a word, to obtain any information that may avail for the purposes of diagnosis from the examination of the menstrual function, the previous uterine history of the patient must be interrogated. The physiological variations which occur in menstruation, both with reference to pain, duration, periodicity, &c., are much too great for it to be possible to establish any precise standard by which we may judge of the state of any given patient. It is with herself, only, *when in health*, that we can rationally compare her if diseased.

"In addition to the symptoms above enumerated, (the local symptoms of ulcerative inflammation of the cervix uteri.) there are the general symptoms to be considered, and they will often throw great light on the real nature of the case. It has not appeared to me hitherto, as I have already stated, that a mere white leucorrhœal discharge—that which I have described as often preceding and following the menses, or any occasional uterine congestion—reacts, to any very great extent, on the health, although it is universally considered to do so by all writers on female diseases. Such a discharge often exists in chlorotic, scrofulous, and phthisical females; but in them I believe it to be merely the result of irregular, disordered menstrua-



tion, itself caused by the general cachectic condition of the individual. In other words, I believe that in these cases the leucorrhœa is only one of the symptoms of a general cachectic, anæmic affection, and not the cause of the anæmia. In the absence of some tangible cachexia, I may say, that I scarcely ever meet with extreme general debility and weakness, co-existing with leucorrhœa, without finding on mature examination, that there is inflammation, and, generally speaking, ulceration of the uterine neck. This is a clinical fact which admits of easy explanation.

"When we consider attentively on what basis are founded the opinions that are now prevalent on this subject in the profession, it becomes difficult to reconcile them to pathological laws. Is it altogether consistent with our knowledge of the diseases of mucous surfaces to admit, that a mere secretion from the mucous membrane of the female genital organs can, in the course of a short time, utterly deprave the functions of digestion and assimilation in a healthy, young female, and reduce her to a state of extreme anæmia? Such is certainly not the case with other extensive mucous membranes. Thus, we often see a very abundant mucous secretion from the pulmonary surfaces, continuing for months or years, without the general nutrition being much impaired, especially when this exudation is not the result of inflammation, but of congestion—of increased vital activity only; in a word, a hypersecretion. But we can, on the other hand, easily understand that the presence of ulcerative inflammation in an organ so intimately connected by its sympathetic nervous system with the functions of animal life as the uterus, may, and indeed must react, to a great degree, on the functions of assimilation and nutrition. This, in my opinion, is the true, the real, and the hitherto unknown, explanation of the general vital depression of the weakness which is so frequently seen connected in the female with leucorrhœal discharge. It is not the discharge that reduces her vital powers to so low an ebb, but it is the sympathetic reaction of ulcerative inflammation of the uterine neck on the functions of life.

"From these considerations I may deduce the following rule: that if, in addition to one or more of the local symptoms described, (in the absence of any decided cachexia,) there is also very marked general debility, it is a powerful reason for narrowly examining the nature of the case, as its very existence is a presumption that the patient is suffering from some deep-seated lesion of the uterus, and more especially from ulcerative inflammation of the uterine neck."

\* \* \* \* \*

"A satisfactory digital examination of the uterus may be nearly always made in a virgin, without injury to the hymen, especially when the vagina and external genital organs have been relaxed by long-continued congestion and inflammation. The hymen is nearly always sufficiently dilatable to admit the index, introduced slowly and with proper care. Generally speaking, the os and cervix are reached with ease, the cervix not being retroverted, as it is when

inflamed in most married females; and when once the finger has reached the os, nearly all doubts may be solved. If the cervix is free from disease, it is soft, and the os is closed; if it is inflamed and ulcerated, the cervix is enlarged, swollen, and the os is more or less open and fungous. This open and soft state of the os may also exist from mere inflammation of the cavity of the cervix."

Having ascertained the disease by a digital examination, carefully made without injury to the hymen, the inflammatory state may be subdued by ordinary and well known antiphlogistic remedies, but should ulceration unfortunately exist, then a small bivalve speculum must be used, sparing again the hymen if possible, but rupturing or incising it if found necessary, and mild cauterization with lunar caustic had recourse to. In a future No. a detail of the more important cases occurring in the practice of the author is promised.

*Adulteration of Medicines.* (From N. Y. Jour. of Med.)

The attention of the profession is invited to the following statement from the New York College of Pharmacy:—

**CAUTION TO DRUGGISTS.**—The Committee of Inspection of the College of Pharmacy, are instructed by the Board of Trustees to call the attention of Druggists to another dangerous fraud. A quantity of a base composition, under the name of Blue Pill, is now in market, having been lately imported by, or consigned to and sold by Messrs. Cumming, Dodge & Co., of this city. It contains but little more than one-fifth the proper proportion of mercury, according to the examination of Prof. Reid, of this College, made at our request, that we might have the corroborating testimony of the best analyst in the city. His certificate of its composition, which we append, shows an extent of methodical depravity in the manufacture, against which honest dealers will have to oppose extreme vigilance in the inspection of what they buy.

The article under notice is put up in rather large, white flat-covered jars, containing one pound each; the joint covered with coarse pink-colored muslin; white label with nothing upon it but the British arms and the words "Blue Pill," in rather heavy letters in blue ink. The mass has tin foil laid over it, under the earthen cover.

From what we learn of its history, this spurious compound was made by WILLIAM BAILEY, of Wolverhampton, whose manufacture of similar Blue Pill, two years ago, was so faithfully exposed by the late Mr. Adamson. A transcript of the correspondence on that occasion may be found in the American Journal of Pharmacy, Vol. XI. (New Series), p. 148. Mr. Adamson's letter still remains unanswered.

|                     |                                  |
|---------------------|----------------------------------|
| GEO. D. COGGESHALL, | } Committee<br>of<br>Inspection. |
| JNO. H. CURRIE,     |                                  |
| WM. HEGEMAN,        |                                  |

New-York, Aug. 9th, 1847.

NEW-YORK HOSPITAL, Aug. 6th, 1847.

Dear Sir—According to the request of the Inspection committee of the College of Pharmacy, I have made an extended investigation into the composition of the Blue Pill furnished me, and have to report the following concerning this dangerous and heartless fraud.

Its composition by analysis is :

|  |      |
|--|------|
| Mercury, . . . . .                           | 7.5  |
| Earthy Clay, . . . . .                       | 27.0 |
| Prussian Blue, used in coloring, . . . . .   | 1.5  |
| Sand in combination with the clay, . . . . . | 2.0  |
| Soluble saccharine matters, . . . . .        | 34.0 |
| Insoluble organic matters, . . . . .         | 12.0 |
| Water, . . . . .                             | 16.0 |

100

I could not see any thing differing in the state of combination of the mercury, from that generally found in Blue Pill.

The density of the Pill is about the same as the genuine. This is accounted for by the large quantity of earthy matter, which, in combination with the water, gives the requisite specific gravity, and makes the deception more plausible.

The presence of so much earthy matter furnishes us with an easy means of trying it. Place 100 grains on a clean iron plate or shovel, and place the shovel over the fire until the pill is reduced to an ash. The genuine gives 2 per cent., or near it; this 29 per cent.

The per centage of mercury can be ascertained by a process proposed by me, and described in the American Journal of Pharmacy for 1844. Your's respectfully,

(Signed)

LAWRENCE REID.

Mr. Geo. D. Coggeshall, Chairman of the Committee of  
Inspection of the College of Pharmacy.

*Remarks.*—This is but a sample of the numerous impositions practised upon American physicians in the manufacture and sale of drugs. We have again and again adverted to the frauds constantly carried on in the manufacture of spurious medicines, and have invited druggists and others conversant with these impositions to expose them through the medium of our pages. We have received in reply two or three letters, which have been published in former numbers of our Journal. We solicit still further communications on this subject.

It may not be generally understood, that the importation of drugs and medicines into this country, is chiefly in the hands of commission merchants, mostly foreigners, (German and French.) who are not druggists by profession, and who know nothing of medicines, except to buy cheaply and sell dearly. These men supply our wholesale dealers, who, for the most part, have nothing to do with the importation of the articles in which they deal, and who are not unfrequently imposed upon, as in the case of Blue Pill, as above stated. The



commission dealers have agents, travelling and resident, abroad, who buy up the refuse drugs in all the principal European cities, and send them to this country, where they generally meet with a ready sale. We may mention, for example, *Rhubarb*, of which, we are credibly informed, there have been but two invoices of a good article (*Turkey*) brought into this market since last December. Immense quantities, however, have been imported, of a worthless, worm-eaten article, called *Turkey*, invoiced from *two pence to eight pence sterling*, (from *four to sixteen cents per pound*.) which, we have reason to know, has been ground and sold to our retail druggists for genuine *Turkey Rhubarb*, worth four or five shillings a pound. The *Compound Extract of Colocynth*, which has been imported into this market for the last year, does not contain a particle of *Colocynth*, but is made up of an inferior sort of *Aloes*, with some other worthless ingredients. A great proportion of the *Compound Extracts* are adulterated in like manner. More than half of the narcotic and other extracts, as of *Belladonna*, *Conium*, *Hyoscyamus*, *Aconite*, *Rhatany*, etc., are entirely destitute of any active properties, as we know from our experience, and *Opium* is now rarely to be met with in a genuine form. The *Oil of Roses* is more frequently than otherwise adulterated with the oil of *Rhodium*, of which there is also an artificial compound prepared for this very purpose. Our *Volatile Oils* are adulterated more than half with sweet and other cheap oils. The *Hydragryum Ammoniatum*, U. S. P., *White Precipitate*, of *Bailey's* manufacture, (*Wolverhampton*.) is now as much adulterated as the sample of *Blue Pill* from the same house, analyzed by Prof. Reid. This is an article of a chemical nature, which should, if prepared according to the *Pharmacopœia*, always be of the same quality; and yet we have its invoice price ranging from three to six shillings sterling per pound, according to quality. We have not ascertained whether it is mixed with *clay*, like the blue pill, *white lead*, *chalk* or *gypsum*, but we have no doubt that one of these will be found to constitute more than 50 per cent. of it, whenever an analysis may be made. An article is now imported, under the name of *Colocynth Powder*, which is probably *Colocynthin*, mixed with some inert vegetable powder; this varies in our Custom-House invoices, from 5 to 14 shillings sterling per lb., and is often two-thirds adulterated. The *Extract of Rhubarb*, from 4 to 9 shillings sterling per pound, according to quality. The *Extract of Sarsaparilla*, as now imported, is a worthless imposition. *Quinine* is now imported in bulk instead of bottles. These latter are now generally manufactured here, together with the labels, according to the latest French patterns, usually the *Pelletier* stamp, we believe is preferred. The *Quinine* now generally in use all over this country, is at least one half *Salacine*; this latter being imported very extensively for this purpose, at an expense of less than one-third that of quinine. Some dealers, however, use flour or starch for the same purpose. We believe that it is owing to the adulteration of this article that such large doses are required, and safely borne,

in the malarious diseases of the South and West. We have known practitioners in these regions occasionally get hold of a genuine article, and they very soon found that their patients, so far from requiring a *drachm*, or even half that quantity, found from five to fifteen grains sufficient. The house of *Teschdorf, Fischer & Co.*, of Hamburg, send us immense quantities of drugs of every description, especially of *Extracts*, as of "*Cardus Benedictus*," "*Chelidonium*," "*Fumaria*," "*Gratiolus*," "*Lactuca Virosa*," "*Millefolia*," and "*GRANINIS*!" Where are these articles used? What are the medicinal properties of the *Extract of Grass*? The only use for the latter, we have very good reason to believe, is to mix with genuine extracts, for the purpose of dilution. The invoice price of these extracts varies from forty cents to \$1,75 per pound.

Much of the *Nitrate of Silver*, so called, now on sale in our wholesale drug establishments, does not contain a particle of the metal; whether the substitution is prepared here or abroad, we do not know. Of the *Hydriodate of Potash* also a large proportion is utterly worthless, *Iodine* not entering into its composition; the article is extensively imported in this shape. In order to have an article on which they can depend, we would recommend physicians every where, to prepare their own Hyd. of Potash, which can be readily done as follows:—Heat slightly a mixture of 100 grains of Iodine, 2 drachms of water, 75 grains of carbonate of potash, with 30 grains of iron filings. The mass is dried to redness. The resulting red powder is heated with water, then filter and evaporate to dryness; 100 parts of Iodine will thus furnish 135 parts of very white iodide of potassium, but slightly alkaline.

Thus we could go through with the whole catalogue of medicines in daily use by the physician. It is now well known that there are establishments abroad for the express purpose of manufacturing spurious drugs for the American market, and it is high time that something was done to put a stop to it. As one important step towards reform, we hope that our wholesale dealers will hereafter import their own medicines, and not trust to a set of sharpers, who think more of money than they do of life and health. There is no propriety in leaving this branch of business in the hands of men who are not competent judges of the genuineness of the articles in which they deal. In the next place, we hope Congress will, at their next session, pass a law, forfeiting all spurious and adulterated drugs, and subjecting the owner or consignee to heavy penalties. We have appraisers now connected with the Custom House, who are regularly educated physicians and chemists, and who are fully competent to detect these impositions, whenever they may be practised. At present, although the government is fully aware of these extensive frauds, it has no power whatever to prevent them; its *ad valorem* estimation may be *nothing*, or next to nothing, as in the case of the rhubarb, appraised *in the invoice* at two pence sterling per pound; but it has no right to exclude the article from our markets. We need a string-

ent law, to prevent such practices in future. Again, physicians must purchase their medicines in the crude state, and not in powder; if they do, they will be imposed upon, nine times out of ten. They must make their own extracts, syrups, pills and tinctures. They must resort more frequently to the use of our indigenous medicines, and never employ a foreign article where a domestic one will answer the purpose. When they do purchase, they should buy only of those wholesale dealers who import their own stock; and not take their articles from those who are unacquainted with the characters of genuine drugs. And lastly, they should deal only with those who sustain the reputation of being *honest men*, and whose consciences would not allow them to go on quietly in the daily practice of imposture and deception, involving the lives and health of their fellow-men. We hope the "New York College of Pharmacy" will pursue this subject, and expose a few more of the frauds now practised in the manufacture and sale of medicines. And although we are not personally acquainted with the Hon. Secretary of the Treasury, R. J. Walker, Esq., we have reason to believe that he will cheerfully co-operate in bringing about a reform in this matter, and thus put a check to the importation of spurious and adulterated articles, which not only detract largely from the public revenue, but prove destructive to the lives and health of our citizens, and often fatal to the reputation of the regular practitioner of medicine.

[Since the above was written, and in the hands of the printer, we have received the following communication from the New-York College of Pharmacy.—ED.]

NEW-YORK, August 24th, 1847.

SIR—In behalf of the College of Pharmacy of the city of New-York, I have the honor to submit for your consideration, and insertion in your valuable Journal, the proceedings of the Board of Trustees, in relation to the importation from Europe of large quantities of sophisticated pharmaceutical and chemical preparations, which must often prove highly injurious to those who may be subjected to their use.

The College has, for many years, exerted all its influence to oppose this system of culpable speculation, by cautioning dealers, through the public prints, against the purchase of such articles as were proved by careful analysis to be dangerous. This it has done cheerfully and fearlessly.

These efforts having proved insufficient wholly to suppress this alarming evil, the College has resolved to ask the co-operation of the other Colleges of Pharmacy, and all the medical institutions and practitioners in both branches throughout the Union, in an application to Congress for a law, declaring that all pharmaceutical preparations and chemicals, which shall be found, upon careful examination, to be spurious, shall be confiscated and destroyed.

With the assurance of my perfect esteem,

I remain your obedient servant,

JOHN MILHAU, Pres. Coll. of Phar. of N. Y.

To CHAS. A. LEE, M.D., Editor N. Y. Jour. of Med.



At a special meeting of the Board of Trustees of the College of Pharmacy of the City of New-York, held on August 9th, 1847, convened for the express purpose of taking into consideration the best measures to prevent the introduction, throughout the United States, of sophisticated and misnamed Chemical and Pharmaceutical preparations—it was unanimously

*Resolved*, That the officers of this institution be requested forthwith to call the attention of the Secretary of the Treasury of the United States to the fact, that large quantities of spurious medical preparations are being introduced daily into this country, not only to the prejudice of the Custom-House revenue and the honest importer, but in the sequel jeopardizing the health and lives of all those who require medical aid, throughout the land. That the Secretary of the Treasury be respectfully requested to apply the most stringent regulations within his power, to check this alarmingly growing evil.

It was further *Resolved*. That the Philadelphia College of Pharmacy, and other Colleges of Pharmacy and of Medicine, be officially requested to unite with us in presenting a memorial to Congress, to devise means to suppress this most dangerous fraud, by making all such sophisticated articles liable to forfeiture.

JOHN MILHAU, President.

OLIVER HULL.

GEO. D. COGGESHALL, } Vice-Presidents.

WM. L. RUSHTON,

JOHN SNOWDEN, Sec.

JAMES S. ASPINWALL, Treas.

---

*Case of Doubtful Sex.* By S. H. HARRIS, M. D., of Clarksville, Va.  
(American Journal of the Med. Sciences.)

The existence of hermaphrodites, or those creatures which were at one time supposed to unite in the same individual the distinctive organs of the two sexes, is now, I believe, wholly denied by physiologists. Creatures of our race, however, have frequently been noticed, presenting such equivocal appearances in their sexual apparatus as to render it exceedingly doubtful as to their sexuality. A monster of this singular character is now living in Mecklinburg county, Virginia, and is probably as remarkable a case of the kind as any recorded in the annals of physiology.

In describing the creature I shall use the masculine pronoun man, more for the sake of convenience, than from any conviction of its grammatical propriety.

Ned, a slave and house servant, wearing man's apparel, is about eighteen years of age, and probably five feet eight or nine inches high; and though not corpulent, is rather robust than otherwise. His head is large, with a coarse masculine face, wide mouth, thick

lips, feminine voice, and a chin entirely destitute of beard. His skin is soft and delicate, with upper and lower extremities well formed and rounded, with the exception of his feet which resemble very much the males of the African race. Thus far, however, his general appearance presents nothing very remarkable, or any thing calculated to excite doubts as to his sexuality. His shining ebony shin and rounded limb, are not uncommon with negro boys, trained up as house servants among the luxurious livers of the South. But on opening his vest and shirt bosom, there are presented two large and well developed protuberant mammæ, having all the external characteristics of the breast of a healthy well-formed young woman. His neck, shoulders and chest partake likewise of this feminine character, having the soft and voluptuous outline of the female. On examining the external genital organs, which, by the way, are exhibited with marked reluctance, a strange and anomalous appearance is presented. The pubis is large, prominent, and covered with hair as in the female, and but for the conspicuous projection of a dwarfish-looking penis, about an inch long in the usual situation of that organ, the creature would at once be pronounced a woman. This penis is naturally formed in every respect, and eminently endowed, as he informed me, with virile sensibility. Immediately below it is a cleft or fissure running back as in the female organ, to the perineum, the sides of which are formed of thick folds of skin, resembling somewhat the scrotum, and shaded with long hair, representing tolerably well the external labia of the female. No testicles can be found. On separating the thighs the fissure is found to be from an inch to an inch and a half deep, smooth at the bottom and exactly in the situation of the vagina. The cavernous portions of the penis may be distinctly felt through the walls of the cavity near the bottom. The membrane lining it appears, in fact, to be only a continuation of the outward skin, but is more soft and delicate; without, however, any of the characteristics of the vaginal mucous membrane. Pressing the finger on the bottom it yields so readily, as to induce the belief that there is a cavity within, the outlet to which is merely closed up by the skin or membrane stretched across the bottom of the fissure. But the anomaly does not stop here. This singular creature has been regularly menstruating for three or four years *through the penis*, attended in its inception and progress, by all the symptoms which commonly characterize the catamenia in young females. So well marked are the returns of this monthly discharge by the usual disturbance of the system, that the elder members of the family are never at a loss to determine when he is under its influence. As in most females in every station in life, there is likewise at such periods a shrinking from observation, and the constant exercise of a sleepless vigilance in preventing exposure. The amount or character of the discharge has never been clearly ascertained, but from his own imperfect account of it, and the evidences furnished by his linen, it differs not very materially either in quantity or quality from that of a young woman.

The question here naturally presents itself, to which of the sexes does this human being belong? In view of all the facts stated, the conclusion, I think, is forced upon us, that the female organs predominate, or, in other words, that while the creature has only one of the organs of the male, and that an imperfect one, he has within the pelvis the interior genital apparatus of the female. That there is a uterus with its appendages I feel no doubt; or whence this regular catamenial discharge, and all those attributes, both moral and physical, which mark the presence of such an organ?—But it has been remarked that the displays in his general deportment, a decided partiality for the society of young females, and it has even been noticed that he exhibits towards them at times strong salacious propensities. This, I think, can be easily accounted for on the supposition, that he has been, from childhood up, taught to look upon himself as a male, and now in imitation of others, deports himself as such to the other sex. Whether his amorous advances to the dusky maidens around him, has ever resulted in any practical display of virility, is unknown. In the absence of all information on the subject, it is fair to conclude, that no seminal discharge has, or ever will take place. Such a phenomenon as a regular menstrual discharge, and the emission of semen masculinum, from the same set of organs, would place the creature in a new order of beings, with sexual endowments and faculties, but a little less remarkable than those ascribed to the fabled hermaphroditis. But whence comes this peculiar fluid? If furnished by a womb, how does it make its way into the urethra?—Or is it thrown off by the bladder acting vicariously for a contiguous organ, the natural outlet of which is occluded in the way before mentioned? These are questions certainly of very little importance in a practical point of view; but relating as they do to the interesting science of physiology, are deemed not wholly unworthy the consideration of the learned.

---

*On Rising too Early after Confinement.* By WM. M. MCPHEETERS, M. D.—(St. Louis Med. and Surg. Journal.)

We have ever found it difficult to impress upon females the importance and absolute necessity of remaining for a sufficient length of time after confinement in a horizontal position, and keeping perfectly quiet. Imprudence in getting up too soon, often entails upon the unfortunate patient, months, and even years, of suffering which might have been avoided had she listened to the advice of her physician, or to the suggestions of common sense. We are satisfied that the practice of getting out of bed too soon after confinement, is very general in our community, and hence it is that such a very large proportion of our female population suffer with prolapsus and procidentia uteri, as well as from other uterine affections, which subject



them to the necessity of wearing pessaries, or to the use of those fashionable, but in our opinion very objectionable, instruments, utero-abdominal supporters. Sometimes this imprudence is attributable to the want of proper precaution on the part of medical advisers, but more frequently it is owing to the folly of patients themselves. On the third or fourth day after parturition, a patient who is "very smart," feels able to sit up in bed, or in an easy chair, and in spite of all that the physician can say, she will, in his absence, sit up for the purpose of changing her clothes, or get out of bed altogether, that it may be made up, and not unfrequently walk across the floor, by way of testing her strength. A moment's reflection must convince any one of the impropriety of such conduct. The enlarged and engorged condition of the womb, the great relaxation of the abdominal muscles, of the vagina, and of the broad and round ligaments, all tend, under the the circumstances, when the body is brought into an erect posture, to force the uterus down into the vagina, and frequently through the vulva. Again, on the third or fourth day after delivery, it is the practice of most physicians to administer a dose of castor oil, or some other mild cathartic, for the purpose of securing an operation from the bowels, which are usually torpid up to this time. Under these circumstances, patients, especially those who "feel smart," instead of using a bed-pan, and evacuating their bowels in a horizontal position, will get up out of bed, and use the close stool, and thus bring about the evils of which we have just been speaking.

These remarks are called forth by two cases which recently occurred in our own practice, where our patients were guilty of the imprudencies here spoken of. In one of the cases, in which we attended in consultation with a medical friend, the labor was prolonged and difficult, and it was necessary to remove the child by means of instruments. It was a first confinement, and the woman had been some fifty hours in labor before we saw her. Her strength was well nigh exhausted, and it was with difficulty that she could be sustained during the operation, which, however, terminated favorably, and the patient was put to bed, with strict injunctions to keep perfectly quiet. On visiting her on the third morning after, we found that her bowels had been very much out of order during the night, that she had been up several times on the close stool, and had suffered very much with straining efforts. During our visit she complained greatly of pain, and uneasiness in the region of the vulva, and on examination we found the uterus highly engorged with blood, and of the size of one's fist, protruding entirely through the labia majora. The second case was that of a young athletic woman, also in labor with her first child, but she got along well. On the third day, the bowels not having been moved, a dose of castor oil was administered, and the patient, contrary to our express directions, got out of bed when it came to operate. The consequences were similar in kind, though not in degree, to the case just mentioned.

In very many instances like imprudencies are not followed so im-

mediately by bad consequences, but it is invariably the case that those who are guilty of such folly, are made to suffer for it, sooner or later. Often, too, the bandage, instead of being pinned tightly around the hips, for the purpose of supporting them, and being made to press from below upwards, slips up, gets in a string, and acts as a ligature around the abdomen, pressing downwards, and consequently doing positive harm instead of good. Too much attention cannot be paid to the subject of bandaging. In the first instance it should be applied and properly adjusted by the physician himself, and he should instruct the nurse how to tighten and keep in its proper position, and it should be worn long after the woman gets out of bed, and until the parts have resumed their natural tone and strength. The material, too, out of which the bandage is made, is worthy of consideration. Of all the articles in common use, we prefer the flannel, doubled, and of sufficient width to extend from the middle of the hips to the umbilicus; it possesses the advantages of being soft and somewhat elastic, and can be brought to fit the irregular surface around which it is intended to pass.

A patient, after giving birth to a child, however easy or natural a labor she may have had, should remain perfectly quiet on her back for at least two or three weeks, at the end of which time, provided every thing goes on regularly, she may be allowed to sit up cautiously in bed, and gradually remain for a short time out of bed, in a sitting posture; but as a general rule, they should not be permitted to rise from their beds under three weeks, and frequently not so soon. This rule may seem a little stringent to those who have been in the habit of getting up at farthest on the *ninth day*, and often walking all over the room long before that period; but time would be saved by observing it, and patients would save themselves an immense amount of subsequent pain and unhappiness.

We are aware that our suggestions contain nothing new or original, but the subject is one of vast importance, and which is too much neglected—it is therefore necessary to add “line upon line, and precept upon precept.” The health and comfort of the female sex is so intimately identified with our own happiness, that whatever affects them materially, concerns us; and we are satisfied, that if due attention was paid to their “proper getting up” after confinement, we would not see so many young and lovely wives suffering with uterine affections—pale and anæmic, and unable to take the least exercise, or even to attend to their ordinary household affairs, without the greatest pain.

---

#### *Wounds and Injuries of the Abdomen.—General Conclusions.*

By G. J. GUTHRIE, F. R. S.—(Ranking's Abstract.)

[*Lectures on some of the more important points in Surgery, 1847.*]

1. Severe blows on the abdomen give rise to the absorption of the muscular structures, and the formation in many instances of ventral

hernia; this may, in some measure, be prevented during the treatment by quietude, by the local abstraction of blood, and by the early use of retaining bandages.

2. Abscesses in the muscular wall of the abdomen, from whatever cause they arise, should be opened early; for although the peritoneum is essentially strong by its outer surface, it is but a thin membrane, and should be aided surgically as much as possible.

3. Severe blows, attended by general concussion, frequently give rise to rupture of the solid viscera, such as the liver and the spleen, causing death by hemorrhage. When the hollow viscera are ruptured, such as the intestines or the bladder, death ensues from inflammation.

4. Incised wounds of the wall of the abdomen of any extent rarely unite so perfectly (except, perhaps, in the linea alba) as not to give rise to ventral protrusions of a greater or less extent.

5. As the muscular parts rarely unite in the first instance after being divided, sutures should never be introduced into these structures.

6. Muscular parts are to be brought into apposition, and so retained principally by position, aided by a continuous suture through the integuments only, together with long strips of adhesive plaster, moderate compression, and sometimes a retaining bandage.

7. Sutures should never be inserted through the whole wall of the abdomen, and their use in muscular parts, under any circumstances, is forbidden; unless the wound, from its very great extent, cannot be otherwise sufficiently approximated to restrain the protrusion of the contents of the cavity—the occurrence of which case may be doubted.

8. Purgatives should be eschewed in the early part of the treatment of penetrating wounds of the abdomen. Enemata are to be preferred.

9. The omentum, when protruded, is to be returned, by enlarging the wound, through its aponeurotic parts if necessary, but not through the peritoneum, in preference to allowing it to remain protruded, or to be cut off.

10. A punctured intestine requires no immediate treatment. An intestine, when incised to an extent exceeding the third part of an inch, should be sown up by the continuous suture in the manner recommended in pages 26 and 27.

11. The position of the patient should be inclined towards the wounded side, to allow of the omentum, or intestine, being closely applied to the cut edges of the peritoneum. Absolute rest, without the slightest motion, should be observed. Food and drink should be restricted when not entirely forbidden.

12. If the belly swells, and the propriety of allowing extravasated or effused matters to be evacuated seems to be manifest, the continuous suture or stitches should be cut across to a certain extent, for the purpose of giving this relief.

13. If the punctured or incised wound is small, and the extravasation or effusion within the cavity seems to be great, the wound should be carefully enlarged, and the offending matter evacuated.

14. A wound should not be closed until it has ceased to bleed, or



until the bleeding vessel has been secured, if it be possible to do it. When it is not possible so to do, the wound should be closed and the result awaited.

15. A gunshot wound penetrating the cavity can never unite, and must suppurate. If a wounded intestine can be seen or felt, its torn edges may be cut off, and the clean surfaces united by suture. If the wound can neither be seen nor felt, it will be sufficient for the moment to provide for the free discharge of any extravasated or effused matters which may require removal.

16. A dilatation or enlargement of a wound in the abdomen should never take place, unless in connection with something within the cavity rendering it necessary.

17. When balls lodge in the bones of the pelvis, they should be carefully sought for and removed, if it can be done with propriety and safety.

18. In a wound of the bladder, an elastic gum catheter should be kept in it, until the wound is presumed to be healed; unless its presence should prove injurious from excess of irritation, not removed by allowing the urine to pass through it by drops, as it is brought into the bladder.

19. In all cases in which a catheter cannot be introduced, in consequence of the back part of the urethra or the neck of the bladder being injured, an opening for the discharge of the urine should be made in the perineum.

20. The treatment of all these injuries must be eminently antiphlogistic, principally depending on general and local blood-letting, absolute rest, the greatest possible abstinence from food, and in some cases from drink, the frequent administration of enemata, and the early exhibition of mercury and opium, in the different ways usually recommended, with reference to the part injured.

---

*On the Effects of Blisters on the Young Subject.* By Dr. J. B. BECK.  
(New-York Journal of Medicine.)

The mode of conducting the process of blistering in a young subject is a matter of greater nicety, and should call for the utmost care on the part of the practitioner. As one of the principal causes of gangrene, is the leaving the blister on too long, this is a point which should be specially attended to. To many this may appear a small matter, but it is really one of great moment, and in relation to which I am sorry to say that the directions given in many of our practical works are so discordant, as to be very poor, if any, guides to the young practitioner. By way of illustration, I will quote a few of them. Dr. Armstrong says, "from twelve to fifteen hours is generally sufficient for the application of the blister in adults, and half that period in children." Dr. Williams says, that "to avoid gangrene in children, it is advisable never to allow the blister to remain on more than six hours." Dr. Dewees states that "in children, the blister is

frequently found to have performed its duty in eight hours, and very often in six. It should therefore always be examined at these periods, and dressed, if sufficiently drawn; if not, it should be suffered to remain until this take place. Evanson and Maunsell say, "in no instance is the blister to be left on more than a few hours (from two to four)—not longer, in fact, than until the skin is reddened, when vesication will follow; but this result should not be waited for, as attendants always will do, unless the most express directions to the contrary be given." Neligan directs that "as a general rule, in infants and young children, blisters should only be left on until redness of the surface is produced, when the application of a warm poultice to the part will cause vesication." Ballard and Garrod remark, that in children a blister should not be allowed to remain on longer than to produce redness of the surface;" and they add, "in very young infants, it has appeared to us doubtful whether even redness should be permitted to occur before its removal." The foregoing is a sample of the discrepancy of opinion in relation to a most important point of practice, and one confessedly too, not unfrequently involving the life of the young subject, as advanced by authors of the highest respectability, and who may be supposed to exert a wide influence in guiding the practice of young beginners in our profession. The fact is, and this perhaps may account somewhat for the difference of opinion just noticed, that no positive rule can be laid down in relation to the precise time that a blister should be left on a young child. From the original differences in the sensibility of the skin in children, the period must necessarily vary, and the only safe general rule, is to be governed by the actual effect produced. For this purpose the blistering plaster should be raised at suitable intervals and the state of the skin observed. And the safe plan is, according to the directions of some of the authors quoted above, to remove the blister as soon as the surface appears uniformly red, and then to apply a soft poultice. In most cases this will be followed by suitable vesication, while any injurious consequences will be averted.

---

*On the Varieties of Headache.* By Dr. WRIGHT—(Med. Times, from Ranking's Abstract.)

The various circumstances under which headache may arise as a prominent symptom, are thus briefly explained by Dr. Wright in a series of clinical lectures.

To give you a general notion of them, as we are yet dealing in generalities—suppose a patient comes to you complaining of headache. This is a very generic sort of term, and may involve a great variety of specialities, some serious, and others simple. One patient, we will say, is in his teens, or not far out of them, yet he looks older by many years than he ought to do. His face is blanched and parchment-like, cheeks sunken, eyes hollow, lustreless, and watery,

and they never look fairly at you : the man is timid, nervous, shuns society, and has no inclination for active pursuits ; he is subject to giddiness and forgetfulness, and has almost constantly a dull, heavy pain at the back of his head, perhaps extending down the spine, with a sense of weight and dragging of his legs. Here you have a nervous system enfeebled and shaken from causes you will easily learn if you pointedly inquire after the personal habits of the sufferer. Another complains of oppressive pain chiefly over his eyes, scarcely ever leaving him, but distressingly aggravated at different periods of the day. It is probable that these periods are subsequent to meal times, and that then the headache is attended also with drowsiness. The man is dyspeptic. He will tell you that his bowels are confined, and that he is troubled with wind. Look at his tongue, and you will see that it is furred with, most likely, a brownish patch in the centre. Percuss the right hypochondrium, and you may find a greater extent of dullness, or more tenderness, than natural. The condition of the great viscus here is wrong. Liver, stomach and bowels, are the sources of that frontal headache. Another patient has pain in the forehead, but it is acute and lancinating, and not persistent. Its periods of accession and departure are pretty regular. Ask the precise spot of the pain, and you will have indicated the exit of the supra-orbital nerve of either side, probably the left. Here you have a case of *tic douloureux*, which may have no obvious exciting cause, or may result from exposure to cold, from dyspepsia, from pregnancy, from uterine disease or disorder, &c. Another complains of aching all over his head, considerably increased by heat or cold, as the case may be. On further inquiry, you learn that the pain is chiefly superficial, and that to rub the patient's hair in different directions, sharply, is to agonize it. Here you have rheumatism of the cranial integuments. Look cautiously after this case. You may suddenly have a pain of a different kind, and deeper seated, ushered in by screaming and shouting, followed by restlessness and delirium, with a glaring and dejected eye—the meninges of the brain will be suffering from metastatic rheumatism in its most active form. It was gout, thus transferred, that destroyed the valuable life of Dr. Ingleby, your late Professor of Midwifery. Another has acute pain darting through his temples and ears, especially when he gets warm in bed ; at the same time, he has what he well describes as ‘gnawing pains’ in his shin-bones ; his nose is tender, and the roof of it painful ; he has, or has had, sore throat, and there are copper-colored patches about his body. This headache has its foundation in syphilis ; mind your treatment, or the more delicate bones of the head and face may be sacrificed.

A delicate female complains of heavy throbbing pain over the middle, or at the back of the head. She has had it several months, more or less, and is liable to periodical exacerbations. The uterus has likely something to do with this pain. It may be a case of simple amenorrhœa ; it may denote the climacteric period of female life ; it may depend upon pregnancy ; or the uterus may be undergoing some



morbid change. This organ, however, may not be at fault; habitual constipation, which females are often in the habit of neglecting, may be the cause of the suffering, or it may be occasionally by hemorrhoids.

Such, and so many, nay, many more, are the varieties of pains in the head, having different causes, and requiring different forms of treatment.

[Dr. Wright has described with great clearness several varieties of headache. We have often met with the following not mentioned by him: An individual rises in the morning with a headache, with which he may or may not have gone to bed. At dinner or supper the evening before he partook of some indigestible article of food which, passing the stomach, is producing irritation in the bowels. In this region green corn is often the cause of such trouble. The remedy is obvious, and consists in a laxative to remove the offending body. A Seidlitz powder or a little Blue-lick water, taken before breakfast operates promptly and affords complete relief.

We have met with still another variety of headache, which generally attended influenza in 1843, and is often associated with catarrh. This is a headache confined to a small space over the eye, in the region of the frontal sinuses, and is not unfrequently periodical in its character. Such headache is sometimes purely nervous, and will yield to an opiate. In the epidemic referred to, this pain in the forehead was the most distressing symptom in a majority of cases, and its subsidence under a teaspoonful or two of paregoric often surprised as much as it delighted the patient. It was found necessary to repeat the opiate two or three days at the recurrence of the headache.—*Western Journal of Med. and Surgery.*]

---

*Treatment of Acute Articular Rheumatism by cold applications to the affected joints, with opium and quinine at night.* By W. S. W. RUSCHENBERGER, M. D., Surgeon U. S. Navy. (From Am. Journ. Med. Sciences.)

Extract from a paper, accompanying Surgeon Ruschenberger's quarterly report of diseases and injuries, at the Naval Hospital, New York. Communicated by THOMAS HARRIS, M. D., Chief Bureau of Medicine and Surgery, U. S. Navy.

"In a case of acute rheumatism, complicated with nodes on the shins and syphilis, an ineffectual attempt to obtain the specific effects of mercury had been made in the commencement of the case.—When in health, the patient weighed 220 pounds. He had been confined to bed for four months, and when admitted was unable to bend the knee, wrist, elbow, or finger-joints, without great pain. Cold water dressings were kept constantly applied to the painful joints, half diet was allowed, and he took at bed time, every night, two pills, composed of four grains of opium, and four grains of sul-

phate of quinine. On the tenth day of treatment he left his bed. His weight was 136 pounds. At the expiration of twenty days the pain had disappeared; the quinine and opium were discontinued. There still remained thickening and stiffness about the joints. For this condition phosphoric acid in syrup of prunus virginiana was prescribed, as follows: R.—Sol. acid phosphoric ʒij; syrup pruni virg. q. s.; ft. ʒviij. M. cap. ʒss in aq. font. ʒiv, q. q. 4ta hora. Under this treatment the functions of the joints were perfectly restored, and the patient gained twenty pounds in weight in thirty days, and the nodes disappeared.

“While taking the quinine and opium the bowels, which had been previously constipated, were regularly moved once in twenty-four hours; but under the use of phosphoric acid, it was found necessary to occasionally prescribe castor oil, and an anodyne at night.

“I have been in the habit of treating acute rheumatism, upwards of two years, by cold applications to the hot and swollen joints, and administering at night from three to six grains of opium, with an equal quantity of sulphate of quinine, regulating the quantity by condition of the pupil alone. With a dilated pupil, I found patients to bear the largest dose without inconvenience, and I have not yet met a single case in which pain was not completely removed in from twenty four to thirty-six hours, provided the attacks were recent, or of not more than a week's duration. Large doses of opium, especially in combination with sulphate of quinine, do not tend to constipate, but rather to relax the bowels. After the pain is removed by the opium, I then resort to the use of the iodide of potassium, in medium doses, say from five increased gradually to ten grains, three or four times a day.

“Passed Assistant Surgeon, S. Holmes, who witnessed the results of this practice in my hands, made trial of it on the coast of Africa, and as he informed me, with entire satisfaction.”

### *Diagnosis of Mercurial Sore.* (From Ibid.)

Dr. Porter, in a valuable course of lectures on syphilis, published in the Dublin Medical Press, gives the following as the characteristics of the mercurial in contradistinction to the venereal sore:—

1. Mercurial sores are not necessarily circular or oval in shape, neither are their edges regularly defined; on the contrary, they vary in these particulars, and assume different forms as they spread; their edges are often quite ragged, loose, and undermined, and their borders are often marked with a thin, transparent cuticle, like that of a newly-formed cicatrix, extending quite around them, and giving them a silvery-white appearance.

2. The bases of mercurial sores are not hard, neither are their surfaces covered with the tenacious adherent lymph so characteristic of venereal; on the contrary, the surface of the mercurial ulcer

may present every variety of shape and appearance, sloughy at one spot, deeply excavated and rapidly ulcerating at another, with exuberant granulations at a third, and exhibiting a tendency to heal at a fourth.

3. But the most striking characteristic of the mercurial ulcer is, its tendency to spread, and the manner in which it enlarges itself. Venereal sores, when not affected by phagedena, increase slowly, and having reached a given size, remain so; the mercurial generally spread quickly, and there seems to be no limit to the size they may possibly attain. I have seen an ulcer as large as my hand in each groin of the same individual. Mercurial sores, too, are easily distinguished from the venereal, when they assume an herpetic character, and heal in one part whilst they are spreading in another, which the latter never do; this latter diagnostic is often extremely valuable in ulcers of the throat and on the penis, where any extensive loss of parts may be most sensibly felt during the life of the patient. The mercurial ulceration, too, often attacks the cicatrix of a recently healed chancre, and a fresh sore is thus formed—a circumstance that does not happen to the true venereal sore, except by some accidental injury, or the application of a new infection.

---

### PART III.—MONTHLY PERISCOPE.

*The therapeutic Action of Nitrate of Silver.*—Dr. Florian Heller determined to examine experimentally the different opinions entertained by authors regarding the therapeutic action of nitrate of silver, whether employed externally or internally. The good effects of this agent when used locally in the pathological changes of the mucous membranes of the eye, of the organs of generation, and as a caustic, are now pretty well known and acknowledged by all. This salt coagulates the albumen and cellular tissue, decomposes also the chloride of soda and the phosphates found in all the secretions, and the result is an insoluble chloride and phosphate of silver. The frequent application of this agent upon the epithelium cells which cover the mucous membranes, while it occasions a rapid and abundant separation of these cells, is followed by a rapid and abundant reproduction of them. But the explanation of the internal action of the nitrate is not so easy. Dr. F. H. carefully examined the blood, the urine and the fæces of patients who took this salt in large doses during several months; as well also its direct action upon the gastric juice. Seven epileptic patients took from 3 to 12 grains daily of nitrate of silver during three full months, making thus  $2\frac{1}{4}$  ounces that each one swallowed; and this without any influence over the disease or direct action on the system, not even the brown coloration of the skin. No change was made upon the blood neither in the urine. The fæcal matter contained the whole silver that had been administered. Mixed with the gastric juice, the nitrate was



decomposed and precipitated by the chlorides of potash, soda and lime, which this secretion normally contains. Not an atom penetrated the blood, and the coloration of the skin noticed by some authors after the use of this salt, Dr. Heller believes to be a mere coincidence.—[*Translated from the Archives Générales de Méd.*

*Cod-Liver Oil in Struma.*—Having mentioned the use of cod-liver oil in the strumous diathesis, I avail myself of this opportunity of corroborating the testimony of those (and, among the rest, of Dr. Bennett) who have extolled the use of this medicine in strumous diseases in general. I have seen it do what I never saw any other remedy effect, i. e., reduce to the natural size amygdalæ that were enlarged from the period of extreme youth. A most remarkable instance was that of a young lady, aged about 19, whose amygdalæ were as large as small walnuts, and which I treated without effect for two years, both by iodine internally, and nitrate of silver locally. A three months' course of cod-liver oil left no trace of the disease behind. Under the influence of this oil, the enlargement of the cervical glands in young persons of a scrofulous habit frequently disappears, and the tendency to the formation of phthisis and the recurrence of strumous hæmoptysis is occasionally overcome. In persons of a consumptive tendency I consider this as a valuable addition to our remedies.

Having mentioned the spitting of blood that so frequently forms the first obvious symptom of consumption, a remarkable case is brought to my memory which I saw along with Dr. Stokes and Mr. Corr. It was that of a young man, a partner in an extensive manufactory in this city, who was attacked on his birth-day with a spitting of blood. The disease did not recur until his next birth-day, and thus he was attacked for several successive birth-days. The last hæmoptysis ushered in the usual train of symptoms attending on galloping consumption. The recurrence of the symptoms on his birth-day evidently arose, not from any real periodicity in the disease, but from nervous and vascular excitement produced by apprehension.—[Dr. Graves, in *Dublin Quarterly Journ. of Med. Science.*

*Treatment of the acute forms of Insanity, particularly Mania, by the prolonged use of irrigation and baths.*—M. Brierre de Boismont, being a candidate for a vacant place in the section of Therapeutics, communicated to the Academy of Medicine of Paris, a work having the above title. He observes that heretofore the greatest number of mania were cases cured from the second to the fourth month, some not until the fifth to the twelfth. By his mode of treatment they are generally cured in a *week*. Of 72 cases, 35 of which were acute mania, 33 were cured; 10 of furious mania, 6 cured; 11 of delirium tremens, all were cured; 10 of monomania, all cured; and of 6 chronic intermittent mania with acute symptoms, all resisted the treatment. They were under treatment from 1 to 15 days. Each

patient took about six baths. The essential plan of treatment was a bath of ordinary temperature which was allowed gradually to cool while the patient remained in it *ten, twelve or even fifteen hours*, receiving upon his head at the same time a cold stream of water, falling the height of 3 or 4 feet.—[*Trans. from the Arch. Gén. de Méd.*

*Treatment of Intermittent Fever by Sulphuric Ether.*—(Gazette Medicale. Trans.) Dr. Challeton has almost constantly succeeded in curing intermittent fever in the neighborhood of Gannat, by giving a half tea-spoonful of sulphuric ether in sweetened water, either at the moment of the chill or in the intervals of four hours during the day preceding the attack. Several other practitioners have confirmed the results thus obtained by Dr. C.

*Efficacy of the topical employment of Croton Oil as a palliative means in pulmonary tuberculization.*—(Gaz. des Hopitaux. Trans.) M. Rayer has obtained good effects from copious frictions made with the Croton oil on patients a prey to the formation of pulmonary tubercles. He commonly has applied 24 drops to the anterior surface of the chest, and recommends the patient to rub them freely with the palm of the hand.

*Tincture of Iodine in obstinate Intermittent Fever.*—Dr. Seguin, of Albany, in a short paper in the *Journal des Connaissances Médicales Pratiques*, December, 1846, states that he has found the tincture of iodine, a very valuable and effectual remedy in cases of intermittent fever, which have resisted quinine and other antiperiodics. It is not equally effectual, he says, in recent cases. He gives it in doses of 30 drops in a little sweetened water, in three doses during the paroxysm, and gradually increases the dose to 40, 50 and even 60 drops.—[*American Journ. of Pharm.*

*Pathology of Urticaria.*—Dr. Douglas M'Lagan has surmised, from the result of a chemical examination of the urine in one case, that urticaria depends upon the non-elimination of urea from the system. In the case in question the proportion of urea was diminished by one half, the total quantity of urine being at the same time not increased. Under the impression that as in rheumatism, in which an analogous condition exists, colchicum is known to be useful, it was exhibited in the above case, and with the best results, as the next examination proved the urea to have been increased nearly threefold. At the same time the cutaneous irritation entirely subsided.—[*Edinburgh Monthly Journal.*

*Variola, Vaccinia, Varioloid and Varicella.*—Dr. Koesch, the author of an essay published under the above title, concludes:

1. That cow-pock is nothing more than small pox, transmitted to the cow by contact.

2. That persons who have been effectually vaccinated may, in some rare instances, contract dangerous small-pox.

3. That small-pox after vaccination is, in the great majority of cases, of trifling severity.

4. That the rarity and mildness of small-pox are in proportion to the recency of the vaccination.

5. That small-pox seldom appears after the age of thirty, but is not always less severe when it does so.

6. That the majority of the vaccinated are entirely exempt from small-pox, even though exposed to contagion.

7. The identity of variola and varioloid is demonstrated by their phenomena, development, and by the results of contagion or inoculation.

9. That varicella is in nowise connected with variola, but is a perfectly distinct disease.

9. That vaccination is the only mode of exterminating small-pox.

[*Medicinische Corresp. Blatt.*, and *Prov. Med. Journ.*]

*The Urine in Ascites.*—In ascites, dependent on lesion of the liver, the urine is always more or less deeply colored, whilst in renal ascites, (Bright's disease or otherwise,) the urine is white and colorless—(Rayer.) This characteristic condition of urine in ascites was perfectly known to the Arabian physicians.—[*Monthly Journal of Med. Science.*]

*Chlorate of Potass in Salivation.*—Mr. Alison states, that having had many opportunities of observing the beneficial effects of the internal use of the chlorate of potassa, ( $\text{KO}, \text{ClO}_5$ .) in the various forms of pure anæmia, in which the intolerance of mercury is notorious, he was led to believe that as these closely resemble in many particulars the state of system produced by the full action of mercury, the medicine might be equally beneficial in the latter, and that the result of numerous trials exceeded his expectations. He warns us, however, that certain precautions are necessary in the use of the chlorate, as if it be given in injudiciously large doses, or for too long a time, it is apt to give rise to inflammatory symptoms. He thinks that it and mercury are antagonistic in their action.—[*Med. Gazette.*]

*Psoriasis Inveterata.*—Dr. Romberg found the aqua picis liquidæ to effect a cure when all other means failed. The aqua was prepared by pouring a quart of cold water over a pound of pitch, and leaving it to stand for twenty-four hours in a cool place; and a beer-glass of the water, filtered through paper, is to be taken every morning fasting, and the parts affected to be bathed with it twice or three times a day. Its use may be continued for months, the only apparent effects resulting being slight diuresis. Six cases are related in proof of the great efficacy of this remedy.—[*Medical News.*]



*Cure of Nævus.*—Dieffenbach says, in flat nævi, up to the size of a crown-piece, lint, steeped in pure liquor plumbi, is to be fastened over the part with a bandage, and wetted by fresh applications of the lead without frequent removal. After days or weeks, the swelling becomes whiter, flatter, and firmer; soon afterwards, little, firm, white spots form on the surface, and the cure is certain. By means of a solution of alum and compression, nævi, so large that extirpation would have been impossible, have also been cured. It may be necessary to keep the remedy constantly applied for six months.

[*Medical News.*

*Treatment of Fissures of the Anus*, by M. DIDAY—M. Diday recommends the patient to apply to the anus, night and morning, with the end of the finger, a portion of ointment, about the size of a cherry-stone, composed as follows :

R. Axungiæ, - - 15 grammes,  
Tannin, - - 1 gramme;

increasing the proportion of tannin gradually to three grammes or more, according to its effect on the sensibility of the part. To apply it efficiently the patient should push his finger as far as possible without forcing the sphincter, and there leave the ointment. Where fissures are situated higher, a solution of tannin may be injected into the rectum with a small syringe. The quantity of liquid introduced should be as small as possible, in order that it may be retained for some time. In both cases the patient should experience some degree of heat, and smarting continues for some time after the application.

[*Annuaire de Thérapeut—Ranking's Abstract.*

*Albuminous Urine produced by the use of Cantharides.*—M. Bouillaud read to the French Academy of Sciences, June 8th, a note on the production of albuminous urine by the use of cantharides. Having had numerous cases under his care where albumen was detected in the urine including true cases of Bright's disease, he determined to make some new researches concerning the different conditions or circumstances under which albumen may occur in the renal secretion. For a long time he had noticed it in those cases where there was undoubtedly serious disorganization of the kidneys, or Bright's disease; but besides confirming his previous knowledge in this matter, his recent researches had brought to light one source of albumen in the urine which had escaped others, and that source existed in the action of cantharides. In many individuals, in whom there was no renal disease, he had large blisters placed on the skin, in those places where they had been previously cupped. In a man who had moderate pleuritic effusion, but whose urine contained previously no albumen, after he had been cupped, a blister was placed over the cut part. The urine passed after this, was put by, and on the next morning it was treated with nitric acid, when it became turbid and white, and altogether assumed the aspect and consistence of weak emulsion.

The action of the cantharides on the kidneys, in this case, was evinced by the frequent desire to make water, the pain and agitation attending it; all which, as in other cases observed, passed off in twenty-four or thirty-six hours afterwards. This was the first case in which the experiment was tried; it was repeated in many others, all confirming the results above obtained. The action of the blisters in the way spoken of, was greater when applied to the skin after cupping, than when this was entire—a fact to be anticipated *à priori*. This curious form of albuminuria disappears at the end of two or three days, and is followed by no dropsy, as is the case where there is organic disease of the kidney.

In England, this action of cantharides in producing albumen in the urine, as well as in causing the exudation of blood, has been previously noticed. The investigations of the French physician, however, are confirmatory.—[*Lancet*.]

*Prevention of Abortion.*—In the number of the Dublin Quarterly Journal for May last, Dr. Griffin advances, in one of his medical problems, "the question whether, when miscarriage or premature labour takes place, at fixed periods, from the influence of an acquired habit, the periodical movements may not be prevented by such remedies as prevent the return of epileptic fits or agues? In an answer to this query, he relates the case of a lady who had miscarried several times at the third month, and came under his care in her sixth pregnancy. Dr. Griffin could not detect any obvious cause of her former abortions, and as all other means had been tried, it occurred to him to try a course of some metallic tonic, given on the same principle as in epilepsy. She therefore took two grains and a half of oxide of zinc, with extract of hops, three times a day, followed by valerian, aromatic spirits of ammonia, and decoction of snake root. She was advised, instead of lying upon the sofa, to take the air as much as possible. Under this treatment she passed the usual period of miscarriage to her great joy. Happening, however, to meet soon after with causes of mental excitement, she experienced the premonitory symptoms of abortion to which she had been accustomed; but by taking a grain of opium every hour till the pain ceased, the accident was warded off, and she was soon able to resume the zinc. She went her full time. A second and still more striking case is narrated.

[*Amer. Journ. of Med. Sciences.*]

*Bronzing of Confectionary.*—According to the Police Regulations of Paris, confectioners are allowed to use only gold and silver, as metallic ornaments to confectionary. Copper, bronze, and all the alloys of copper and zinc are prohibited. Some confectioners have, however, employed sham gold; an alloy formed of zinc and copper. A large quantity of confectionary thus ornamented, has been recently seized at Bordeaux, and an action has been commenced against the confectioner who supplied the articles. He produced some of the

powder, which he said he procured of a druggist, who sold it to him as a mixture of talc and oxide of gold. The application of nitric acid and ammonia, however, soon proved that the gold was a copper alloy.—*Jour. de Chimie.* Nitric acid is perhaps the best test, as some of these alloys very closely resemble red gold in colour. The copper alloy is immediately dissolved by the acid, forming a green coloured solution; gold remains unaffected. These copper alloys are much used in England for ornamenting gingerbread, and Scheele's green and chromate of lead are also employed for the purpose of colouring sugar plums. *De minimis non curat lex.* The English law thinks any interference with this mode of selling poisons, an invasion of the liberty of the subject!—[*London Med. Gaz.*, and *Idem.*

*Pectoral Syrup.*—(*Gazette Medicale. Trans.*) Dr. Maroncelli recommends the following syrup to facilitate expectoration and calm the coughing, without the objection and inconvenience of containing any opiate preparation:—

Take of Balsam of Tolu, 60 grammes. Agitate for two hours in boiling water 3000 grammes, pour it then upon the

|                          |               |
|--------------------------|---------------|
| dry leaves of Digitalis, | } 16 grammes. |
| “ “ Belladonna,          |               |
| Ipecacuanha, bruised,    | 4 grammes.    |

Let it macerate for 12 hours, filter and add white sugar, 6000 grammes. Heat moderately to dissolution of the sugar, and then clarify with the white of an egg in 125 grammes of water. Dose: two to four teaspoonsful occasionally during the night.

*To remove the Bitterness of Epsom Salts.*—(*Journal des Conn. Med-Chir. Trans.*) M. Combe says that 10 centigrammes of tannin in the water necessary to dissolve 30 grammes of Sulphate of Magnesia, will destroy its bitterness. The taste of the tannin may be removed by 10 grammes of roasted and pulverised coffee—the whole taken in a little broth.

*A pleasant Substitute for Epsom Salts as a Purgative.*—M. Garot recommends the following formula for the preparation of tasteless purgative salts (citrate of magnesia):—

|                       |         |            |
|-----------------------|---------|------------|
| Carbonate of Magnesia | - - - - | 15 parts   |
| Citric acid           | - - - - | 21 to 22 “ |
| Aromatic Syrup        | - - - - | 60 “       |
| Water                 | - - - - | 300 “      |

The citric acid is separately dissolved and added to the carbonate of magnesia diffused in water.

As thus prepared it is not effervescing; but it is easily rendered so by adding only half the quantity of acid, and reserving the addition of the other half, until the dose is taken. The above proportions in grains would constitute a dose.

Dr. Pereira long since suggested the use of citrate of magnesia in

*Handwritten note:* 15 grs



nearly similar proportions. He found that one scruple of crystallized citric acid saturated about fourteen grains of light or heavy carbonate of magnesia.—[*Lond. Med. Gaz.*

*Syrup of Wild Cherry Bark.*—Take 4 ounces of the powdered bark and macerate in 12 ounces of water for 48 hours—remove the fluid by displacement and add 24 ounces of sugar. Apply no heat, for that would dissipate the hydrocyanic acid, and the syrup would ferment.

*Acid Nitrate of Mercury.*—Dr. Neligan gives the following as the formula for the preparation of this new and useful application:—Take of pure mercury, 100 parts; commercial nitric acid, (density about 1380,) 200 parts: dissolve the mercury in the acid with the aid of heat, and evaporate the solution until it is reduced to 225 parts.  
[*St. Louis Med. and Surg. Journal.*

*Mode of Administering Aperients to Children.*—Phosphate of soda may be used conveniently as a condiment in soup in the place of common salt. Children may be unconsciously beguiled into the taking of the medicine in this way, and it will be found an excellent purgative.—[*Med. Times*—and *Med. News.*

*Carminatives and Tonics.*—Cullen's opinion was that coriander-seeds correct better than any other carminative the griping effects of senna. Cascarella, says Dr. Dick, is an excellent aromatic tonic, which agrees with most stomachs. It may be either given by itself, or else conjoined to stronger tonics or purgatives. Thus it corrects the cold and griping tendency of senna and neutral salts. In a course of tonics we may often advantageously commence with cascarella, and go on to gentian and quinine.—[*Ibid.*—and *Idem.*

*On the removal of Stains on Linen made by the Nitrate of Silver*—by W. B. HERAPATH, M. D., London.—Medical practitioners in the habit of using the nitrate of silver extensively, as a remedial agent, must have frequently heard loud complaints of their patient's linen having been indelibly stained and spoilt, by some accident having occurred during its use; and in many cases, patients have refused to employ these preparations, in consequence of the extensive destruction of linen which they occasion. I have therefore very little doubt that the following observations will prove most acceptable to my brother practitioners.

These dark stains consist of very finely divided metallic silver in intimate union with the fibres of the cloth. Had they been oxide of silver, any diluted acid would have dissolved them; but nitric acid alone produces any effect upon them, which of course cannot be employed on account of its powerfully destructive effects upon the linen fabric. Iodine immediately converts them into iodide of silver, which

is instantly dissolved by a solution of hypo-sulphate of soda, and the cloth remains as white as when issued from the bleaching-house, and as firm and durable as ever.

The best mode of employing this substance is to strain the spotted linen over a basin of hot water, and then to let fall upon each spot, previously moistened with water, a few drops of tincture of iodine, and instantly to pour sufficient solution of the hypo-sulphate of soda to dissolve the iodide produced, and then immerse the spot in the water beneath, to wash out and cleanse the tissue, at once, from the stain and chemical re-agents employed. The tincture of iodine of London Pharmacopœia strength is the one I employ; and one drachm of crystallized hypo-sulphate of soda, dissolved in two ounces of water, will make an excellent bleaching liquid.

A patient may thus be very readily taught the manner of removing an unpleasantness frequently attending the use of a most valuable remedy.—[*Lancet*.

---

## MEDICAL INTELLIGENCE.

---

**MEDICAL COLLEGE OF GEORGIA.**—Prof. MEANS is to deliver the Introductory to the next Course of Lectures in this Institution. This will take place on Monday, November the 8th, at 12, M.

Amidst the many changes which have occurred during this year among the professors of the Medical Colleges of the United States, our own has remained free from resignation; all the members of its Faculty have been preserved by a kind Providence, and are now ready to enter upon their duties.

Considerable additions have been made to the Chemical apparatus.

**OUR EUROPEAN CORRESPONDENT.**—During our recent visit to Paris, we were fortunate enough to make the acquaintance, and secure, we trust, the friendship of a gentleman, now resident of that city, who for *sixteen years* had been connected with the anatomical chair in one of the most flourishing schools of medicine in Great Britain. Below, we present the reader with his first letter, which will no doubt be read with much interest. Our correspondent preferred to remain unknown, hence the assumed initials to his communication—this we regret, as it is our wish to give full credit to every one from whom we may derive valuable information.

*Diseases about the Os Uteri—Clergyman's sore throat, &c.*

PARIS, 13th Sept., 1847.

My Dear Sir,—The morning after you left Paris, I met Dr. Gibson, of Pennsylvania; and between the Professor and Mr. T., of Savannah, I have not had a moment's leisure to write a letter. T. and his son have departed this forenoon for Liverpool, and Dr. G. goes on Saturday, to sail by the Steamer of the 4th Oct. Mr. M. is well—I am in possession of the August number of your Journal, which he kindly gave me. Among other places I visited with Dr. G., were the *Lourcine*\* and the *Necker* Hospitals. In the former we saw many cases

---

\* This institution is destined for the exclusive reception of public prostitutes of Paris, labouring under the syphilitic disease.—[*Edr.*

of catarrh of the uterus, where the solid nitrate of silver was introduced for about half a minute into the os uteri. In superficial ulcerations of the os uteri the acid nitrate of mercury is employed—taking great care that none of the liquid touches the vagina, and for this purpose, a quantity of water is instantly afterwards introduced through the speculum. This practice is repeated every 8 or 10 days, during the progress of the treatment,—with almost daily applications of large quantities of the powder of alum, introduced with a brush through the speculum. With these means of cure, are combined baths of a moderate temperature, for one or two hours at a time, and frequent injections of cold water. In Uteralgia, 3 drachms of the Belladonna to 1 lb. of water in decoction, as an injection 3 times every day, or the decoction of the heads of Poppies, combined with counter irritants to the skin. Trousseau is fond of using a pill of the Ex. of Belladonna and a small quantity of Gallic Acid, which he desires the patient to insert high up the vagina, and moistened with saliva or any other bland fluid. Bleeding is never now, I believe, had recourse to, excepting in very peculiar circumstances, for *simple enlargement* of the neck or body of the womb, unless in acute cases depending on painful menstruation, with evident inflammation. In several of the patients that had been treated with the Alum, the vagina was actually lined with a membranous looking layer which required to be detached before reapplying the alum. In this connection, permit me to add that I have seen following a menstrual period, more than usually painful—the mucous membrane itself of the uterus entirely discharged. This is a “fixed” fact, admitting of no doubt, and induces me to mention, that last fall I assisted at two dissections here, along with Prof. Coste of the College of France, where it was clearly and unequivocally demonstrated that in normal impregnation the veritable mucous lining of the uterus constitutes the membrana decidua. All this was known before, however. The opinion is here, as in London, becoming almost universal, that leeches should not be applied to the neck of this organ; and among other reasons, for this important one, that the bites often cause ulcerations; and nothing you know is more difficult or troublesome to cure *permanently*. In uterine catarrh, where the discharge is copious, a plect covered with equal parts of lard and alum is introduced into and retained in the canal. Velpeau introduces the solution of the Acid Nitrate of Mercury into the neck of the uterus, and it seems a very powerful agent for destroying granulations and the thin walls of the follicles, from which last, in many cases, nearly all the discharge proceeds, particularly in *fluor albus*. Ricord throws a strong solution of the Nitrate of Silver into the neck of the organ—taking care that the instrument only half fills the os uteri, and also, that the quantity applied will not more than half occupy the cavity, and this, for fear of any of the liquid passing by the tubes into the abdominal cavity; although he deems this accident next to, if not absolutely impossible in the living subject. Jobert, of St. Louis Hospital, is in the habit of applying the hot iron in simple enlargement of the neck, without ulcerations; sometimes 20 or 30 times, at intervals of a fortnight or three weeks; and in this way, at length, a large portion of one or both of the lips, is destroyed—without, however, as far as I have been able to ascertain, permanently removing this inveterate affection. The truth is, the enlargement is *very rarely* confined to the neck alone. As the vaginal portion of the organ is always entirely insensible, and apparently unprovided with nerves, no pain is experienced during the application of the hot iron, which seldom fails to afford temporary relief. Notwithstanding the profuse discharge, that often comes from the uterus, innumerable dissections have satisfied me that ulcerations internally rarely or never exist, unless complicated with malignant disease. Thickening, turgescence, and in particular, a granular condition of the cervical portion, chiefly with enlargement of the lacunæ, are the appearances met with after death, which unfrequently, I should say, never happens, from this complaint of itself. We saw several patients with *vaginitis* who were treated by the plect covered with the Nitrate of Silver and lard, in the proportion of 3 grains of the former to an ʒ. of the latter, and suffered to remain for 10 or 20 minutes, or withdrawn only when the pain becomes acute.

We had a long conversation with Trousseau, regarding his experience of the efficacy of the Nitrate of Silver in diseases of the larynx, especially of the parti-



cular kind so frequent among clergymen in the United States. He said that the membrane of the lips of the glottis, was often involved in consequence of a particular species of inflammation of the throat and pharynx, just in the same manner, as the membrane of the uterus is seized through extension along the vagin, &c. He applies the solution of the Nitrate of Silver to the back part of the pharynx with a camel's hair pencil, of about the thickness of the little finger—at the same time depressing the tongue with a long spatula: often, also, he touches the parts affected with a small piece of sponge, soaked with the solution, the sponge being fixed to a long rod of whalebone, very much bent at the end to which the sponge is secured. In less severe states, he prefers the Sulph. of Zinc or Copper. He also, occasionally uses the Nitrate of Silver in the solid form; indeed the same remark is applicable not only to the mucous membrane of the throat, but to all those surfaces that are open or exposed. Many practitioners believe, that they insert the solid nitrate of silver into the cavity of the larynx itself, down to the true vocal cords. But, it is not so, for although a strong tube can be passed into the trachea without creating much uneasiness, especially if the operation of passing be performed suddenly and with force, it is truly a very different thing in relation to liquids. This is abundantly evident, and when inflammation and swelling co-exist the operation is utterly impracticable. Fortunately the ulceration is extremely slight, should it happen to be present; for if not connected with constitutional syphilis or tubercular consumption, chronic laryngitis is most usually unattended with ulcerations or vegetations.

The mail, by England, closing this evening, I shall therefore as far as time permits, give you extracts from the Journals, &c., concluding by assuring you that before long you will again hear from me, it is to be hoped, with something more interesting than this sheet.

*Hopital des Enfants.* M. GUERSANT, the father.—(From L'Union Médicale of Tuesday, 31st August, 1847.)

*Convulsions in Infants.*—This disease has for cause, simple lesion of “*innervation cérébrale*,” without any organic alteration—idiopathic convulsions; or it depends on an organic lesion of the nervous centres,—symptomatic convulsions; or it is the *consensus* with or effect of diseased organs more or less distant—sympathetic convulsions. The idiopathic convulsions, attack infants in a sudden manner and apparently when enjoying perfect health, acquire speedily their highest degree of violence,—then disappear at once, without leaving any other functional trouble, but a feebleness which lasts but a short time: in other words, in the interval of the fits, the infants have neither fever nor headache, no disturbance of ideas, nor of the exercise of sense, no change in the secretions, or in the heat of the skin, and no derangement of digestion or of nutrition. The convulsions arise under the influence of a lively stimulation of the nervous centres,—return at intervals more or less distant, and yield either spontaneously, or in consequence of appropriate means. Convulsions *sympathetic*, of a modification more or less profound of the cerebral centres, are announced, in general, by pain of the head, more or less acute, exaltation of sensibility, perversion of intelligence, and often even a little fever. At the moment of the attack, we discover agitation, incoherence of speech and distressing cries, heat of head, vomiting and violent cephalalgia, &c. These convulsions, are prolonged during some hours or days, with remissions, during which time the spasms lose their violence, without the patients recovering the complete exercise of their cerebral functions; and when they have disappeared, they leave behind them a marked prostration of intelligence of sensibility, and of mobility. *Sympathetic* convulsions are constantly connected with perturbation, either apparent or concealed, of some function essential to life—or, at least, with a morbid alteration of some organ more or less important. Among these organs, the stomach holds the first rank. Of this fact, M. Guersant gives numerous extraordinary examples; he has seen indigestible food remain in the stomach many days, and excite convulsions which continued until these substances had been expelled. Thus, in a child, the convulsions lasted almost without intermission during nine days: a spoonful of white wine forced into the mouth produced vomiting of a portion of omelet, and a great number of gooseberries, some of

them entire. On which, the convulsive movements almost immediately ceased. The preceding characters commonly suffice to distinguish, in children, the particular kind of convulsions. Yet there are not a few occasional exceptions. The chain of symptoms, is often nearly the same in the various species. And although the idiopathic and sympathetic fits are generally of short duration, and not usually followed by any important derangement in the cerebral functions, these convulsions may, if prolonged with frequent returns, occasion a disorder as serious and persistent, as those caused by organic disease. It is in the careful study of the consecutive accidents, and not in the form of convulsions or even in their extent, that we can draw the elements of our diagnosis. Generally speaking, the danger of convulsions, as in exact relation with the nature of the exciting cause. The least dangerous are the idiopathic. Nevertheless, repeated attacks may terminate, when the patient is very young, in idiotism, or in death; and that too, without our being able to discover on dissection, in the nervous centres, any appreciable lesion. At the moment of a convulsive attack, it is difficult to pursue any rational mode of treatment, because the diagnosis is rarely fixed. We are influenced by the general condition of the patient, &c. If the means at first employed succeed, we continue them, if not, we try new remedies: antiphlogistic, revulsive, purgative, compression of the carotids, antispasmodics, cold irrigations on the head, and unfortunately without success. Bleeding, general and local, according to the gravity of the symptoms, have been much relied on. Leeches are most commonly employed, and they are put behind the ears, and when the patient is irritable to the ancles, when the flow of blood should be encouraged during one or two hours, according to the effect produced. Compression of the carotids, so highly recommended by M. Trousseau, apply principally to convulsions of the congestive form, and confined solely to one side of the body. We practice this compression on the carotids of the side opposite to the one that is convulsed, with the thumb, fore and middle fingers, united; and with these placed parallel to the axis of the artery, and the palm of the hand directed outwards, so as not to compress the larynx or trachea. This compression, in some cases, appears to arrest for a very short time, the access of the fits. As however its action is instantaneuous, if it does not after a few minutes avail, it should be abandoned. Revulsives to the skin, or intestines, are almost always employed. Cataplasms of the flour of mustard, to the lower limbs, are much in vogue. Some use a sponge with boiling water, which they move quickly along the inferior extremities—others apply blisters or ammonia. We also administer calomel with jalap internal, or perhaps rather purgative enemata. Refrigerants applied to the head have almost constantly a good effect. The most incontestible advantages are derived from cold effusions; and also continued irrigations directed in preference on the fontanel in the case of infants. These irrigations create, sometimes, a depression so alarming that it is necessary to suspend them, or the patient may perish under the jet of water. In certain cases the convulsions are accompanied with a general chill, which contra-indicates the use of cold effusions. Among antispasmodics, we place in the first ox. of zinc alone or combined with musk, ether, valerian or assafoetida. It is when the disease has not yielded to the preceding means of cure, and when the convulsions do not depend on congestion, that we are authorized to have recourse to antispasmodics. Of all these last enumerated remedies the ox. of zinc is the most successful. Guersant gives it in progressive doses up to 120 centigrammes during each day, divided into 9 or 10 powders mixed with sugar. Sometimes he unites the musk with the zinc.

I subjoin a communication on *Epilepsy*, but first take leave to state, that a new and valuable means of diagnosis has been quite recently established, between this disease and puerperal convulsions,—in which last, albumen can always be detected in the urine, so at least M. Cazeau stated in his lecture the other day. (Medical Gazette, 11th Sept., 1847. Academy of Sciences, 6th Sept.) M. Plouviez, of Lille, has presented a treatise on Epilepsy, which he regards as a permanent aberration of the manner of the sensibility (*"du mode de sensibilité"*) of the brain, the existence of which is manifested by a tendency to convulsive attacks. He thinks that by proper treatment, one may often succeed in destroying this condition, especially when it has for a cause, strong moral emotions,

fright, for instance. 1st. Agents whose effects modify the cerebral system. His formula is—Watery Extract of Belladonna, 2 grammes; Digitalis in powder, 3 gram.; Indigo, 10 gram.; Mucilage, q. s. ft. 50 pills. Three or four days before an attack, commence with one pill—if it appears to have no effect, give another at noon, and even a third during the evening. The dose is augmented gradually until there is produced slight intoxication and somnolency. The medicine is intermitted for two or three days, after the period of the attack has passed, to recur to it again at the approach of another access. M. P. continues in this way for a year or more. One ought never to be discouraged when a slight amelioration has once ensued. He maintains that by perseverance, we will sooner or later triumph over the disease, and that success depends on the degree of intelligence used in applying this mode of treatment. 2d. Cold baths and the “botte Junod.”\* The cold baths are to be taken at a temperature of 75 degrees for three or four minutes, then they are lowered insensibly, even to freezing, according to the susceptibility of the patients. To be careful to avoid violent shocks. In going out of the bath, the patient is covered with blankets, to excite perspiration for several hours. Not to excite acute pain, he still employs the “botte Junod,” and uses it for 25 or 30 minutes. These three means are not administered simultaneously, sometimes he gives pills with the cold baths, sometimes with the boot of Junod, and always three or four days before an attack. 3d. Auxillary means—bleeding, leeches and revulsives. These last not always necessary, excepting in certain cases.

*Leeches.* (From Union Médicale, 31st August, 1847.)—Since 1843, leeches have been submitted to the process of stripping or disgorgement at the Hotel-Dieu, and each year the administration has realized a considerable profit; it amounted, in 1846, to 27,874 francs. In the first year, for example, 28,000 leeches made 52,000 bites. Although no inconvenience or complaint has arisen from the use of disgorged leeches, all those applied to the patients in St. Louis, the Lourcine and the Midi, (venereal hospitals,) are, for obvious reasons, excluded. Within a few hours after the leeches have acted, they are placed, a dozen at a time in water containing 16 parts in the 100 sea salt, from which they are soon withdrawn and plunged into water, “which feels very warm to the hand.” The leeches are then pressed slightly between the fingers, when they void without effort all the blood they had taken. After which, they are put into earthen pots, containing fresh water, renewed every 24 hours. In about eight or ten days more, they are again fit for being reapplied—and so on for the third or fourth time. If they are fatigued or not in good condition they are conveyed into small ponds constructed at the Hotel-Dieu. These tanks are lined with Roman cement, and filled with water, which is renewed as often as the *slightest alkaline trace* is perceived. One small basin is sufficient for 50,000 leeches. The bottom is covered with fullers earth, in which are planted several aquatic plants. A gentle, but constant current of water passes through the basin. When they desire to catch the animals the water is agitated; those that are vigorous come to the surface, the others remain in the fullers earth. The whole expense incurred is a mere trifle.

*Iodide of Sulphur in Diseases of the Skin*, (from the same Journal,) formerly used by M. Bielt, as an external application for the cure of Porriago, and tuberculous affections of skin, has recently been highly recommended by M. Escolar, of the general hospital of Madrid. In children he commences with 2 centigrammes and a half, and in adults with 1 decigramme. The dose may be increased in the former to 15 centigrammes, and in the latter to 3 decigrammes. In support of his opinions, M. Escolar reports nine cases of different diseases of the skin, which were all cured by the Iodide of Sulphur, after having resisted all other remedies. He says, in his work, having never seen bad effects from the employment of this medicine, one ought not to hesitate to give it, particularly in herpetic affections.

\* *Botte Junod.*—By this term is meant a kind of boot so arranged as to exhaust the atmospheric pressure within it—a powerful revulsive means from the head. Junod is the name of the inventor.—EDR.



*Gangrene of the Lung without constant fatidity of the Breath.* By M. LEURET, Physician-chief of Bicetre.—(From Gazette Médicale, 4th Sept., 1847.) Gangrene of the lung, although a rare disease, is most usually seen in the insane. M. Guistan, in a memoir published in 1836, states that he had then seen thirteen cases. Those that have occurred at Bicetre, have all proved fatal, having been combined with paralysis, gangrene of the back, &c. The existence of the gangrene would not have been discovered before death, if the patient had not happened to cough at the time of the visit. "I conversed," says M. L. "with this patient; he coughed, when suddenly I perceived an excessively fœtid odour. I searched around, and in the bed, to discover its source—the patient coughed again, when I ascertained the fœtor proceeded from the effects of the cough. On its ceasing, the gangrenous odour disappeared. M. Marcel and I percussed the chest, which afforded no abnormal sound. No rale could be perceived on auscultation. I do not know that an analogous fact has been noted by authors, for in the observations published on gangrene of the lungs, the fœtor of the breath is given as a constant symptom, whereas, in this patient, it only existed during the period of the coughing." Although M. L. visited him every morning for twenty-eight days previously to death, and M. Marcel returned to visit him once or twice during the day, no gangrenous expectoration could be detected, and the gangrenous breath was only once perceived. The right lung presented in the posterior part of the interior lobe, a cavity capable of containing a large egg. The cavity was irregular, of a greenish black color, and emitted a strong gangrenous odour. (16th Sept., 1847.)

From the Constitutionnel of 5th September, 1847.—M. Chassaignac has lately presented a memoir to the Academy of Sciences, on the *Nature and the Treatment of Purulent Ophthalmy*, in which he endeavors to prove: 1st. That purulent ophthalmy of new-born infants is in many, if not in all instances, a diphtheritic ophthalmy,—false membrane. 2d. The diphtheritic membrane is consistent, and adheres strongly to the conjunctiva, and cannot be detached in a complete manner, neither by washing, nor by rubbing with any soft substance; whereas, by seizing it with a forceps it can be removed entirely in one piece. 3d. The abstraction of this membrane hastens in a striking way the cure of ophthalmy of new-born infants. 4th. The frequent use of injections and washes of the eye, and the internal surface of the eye-lids, leads to a rapid cure of this ophthalmy, i. e., "*des douches* practised from a certain height." M. Flourens thinks, from researches he has made on mucous membranes, that those above alluded to, are not accidental false membranes, but the epidermal lining of the eye-lids.

This opinion of M. Flourens is much more plausible than correct, for how can we explain the re-appearance, in a few hours, of these membranes, more or less extensively, often fifteen or twenty times during the second stage of the disease, and this too, after they have been most carefully removed. It now occurs to me, that I omitted to mention that water irrigations are in great repute, at this time, here. Not content with applying them in all cases of acute vaginitis and conjunctivitis, many also have recourse to them in chronic and scrofulous diseases of the eye and eye-lids. A constant stream is directed on the parts, for, from fifteen minutes to half an hour, morning and evening. Sometimes, in vaginitis, oftener and for a longer period. An instrument called an Irrigator is used, which consists of a cylinder, piston and an injecting tube, moved by machinery.

O. P. G.

*The Treatment of Epilepsy*, by Professors ROSTAN, VELPEAU, WILLIAMS, &c. By reference to the Letter of the Editor, in the last No. of this Journal, it will be seen, that he had not at its date received communications from the above named gentlemen, on the subject upon which they had been consulted. He now briefly gives the treatment recommended by them in the case alluded to:—

1st. Take for drink the infusion of the flowers of the peach tree, or the leaves of the laurel.

2d. Take three times a week a bath with the infusion of the linden tree, or of

the leaves of the laurel, and of the temperature of 98°, while cold water is poured upon the head—the patient remaining in it four or five hours.

3d. In the interval between the baths, the patient will occasionally be placed standing in a foot-bath at the temperature of 104°, and water at 78° be poured upon the head.

4th. Take of the powdered *root* of belladonna, one grain each day for the first week, and increase one gr. each week, watching carefully the effects of this article upon the system—diminishing, augmenting or suspending it, according to its action.

5th. Let the patient be purged at least once a week.

(Signed,)

ROSTAN.

Paris, 14th August.

VELPEAU.

M. LEURET, physician in chief to the Bicêtre Hospital, was also consulted.—He agreed with the treatment just related, and laid great stress upon *exercise to fatigue*, and also recommended to arrest the premonitory symptoms of attack, a large dose of opium and musk.

Prof. WILLIAMS' letter is as follows:

LONDON, Holles St., Aug. 25, 1847.

The chief indication in the treatment of these cases is obviously to endeavor as much as possible to equalize and strengthen the circulation, whilst all causes of occasional embarrassment or excitement are carefully avoided or counteracted. The treatment of each individual case will require a very careful examination into the state of all the functions, and the application of fitting measures to correct any that may be in disorder. The functions which I have found most frequently erring (even when not mentioned by the patient) are those of the heart and kidneys. Palpitation often precedes the attack without being obvious to the patient; and to prevent this I have found hydrocyanic acid or digitalis, in doses gradually increased, very serviceable remedies; and they may be combined with tonics or otherwise, according to the condition of the system. An unhealthy state of urine, manifested by either scantiness or albuminous impregnation, I have discovered in several cases, and have corrected by a large blister to the loins, followed by a free and long continued use of the expressed juice of *Taraxacum* (or Extract prepared without heat) together with bi carbonate of potash or other diuretic salt. In addition to these means, others calculated to improve the general health and tone of the circulation—much open air—regular moderate exercise, careful diet, &c.—should not be overlooked.

The prognosis is extremely varied and cannot be stated without a very minute knowledge and some experience of the case. I have known many cases recover partially—some entirely: in others no improvement took place, but ultimately gradual lapse into altered structure of the encephalon. A lady, the mother of one case now under my care, was subject to occasional fits from puberty until her second confinement, which happened about 14 years ago, since which she has had none. Her daughter has also had several since puberty, but she has had only one in the last 12 months, during which she has 3 times a day taken gr. iss. Zinc Sulphat. with gr. xij. Ext. Flor. Taraxaci (prepared without heat.)

The above are the best hints which I can offer, without the advantage of seeing the patient; and remain,

Yours, faithfully,

C. J. B. WILLIAMS.

*Adulteration of Medicines.*—We call the attention of practitioners of the healing art, to the disclosures made known, and to the remarks which follow them, in the article with the above title, selected from the New-York Journal of Medicine. In confirmation of what is therein published, we state that of 4 3/4 of *Assafetida*, carefully weighed by one of our students, there was deposited on the filtering paper over 3i. and 3vi. of sand, after the tincture was made from it. While Turkey rhubarb is invoiced at 4 cents per pound, we know the same

article here costs us five dollars. Is it not time that some action should be taken on the all-important subject of the *genuineness* of our remedial agents? Surely life and health are too precious to be thus trifled with; and Medicine as a science is difficult enough for most men, without adding the monstrous evil of using impure medicines in its practice.

We commend the movement of the College of Pharmacy of the city of New-York on this subject, and hope action will be taken upon it by all our Colleges and Medical Societies. Let the profession be united, and we feel persuaded that Government will be induced to check the importation of adulterated chemical and pharmaceutical preparations.

METEOROLOGICAL OBSERVATIONS, for September, 1847, at Augusta, Ga. Latitude 33° 27' north—Longitude 4° 32' west Wash. Altitude above tide 152 feet.

| SEP. | Sun Rise. |           | 4, P. M. |           | WIND. | REMARKS.                      |
|------|-----------|-----------|----------|-----------|-------|-------------------------------|
|      | THER.     | BAR.      | THER.    | BAR.      |       |                               |
| 1    | 66        | 29 87-100 | 80       | 29 85-100 | S.    | Fair.                         |
| 2    | 68        | " 85-100  | 76       | " 85-100  | S. E. | Cloudy.                       |
| 3    | 69        | " 86-100  | 73       | " 84-100  | S. E. | Rain, 95-100 of an inch.      |
| 4    | 67        | " 84-100  | 74       | " 82-100  | S. E. | Rain, 1 8-100 of an inch.     |
| 5    | 70        | " 84-100  | 84       | " 83-100  | S.    | Fair.                         |
| 6    | 71        | " 83-100  | 88       | " 79-100  | N. W. | Fair.                         |
| 7    | 68        | " 81-100  | 78       | " 80-100  | S. W. | Fair—rain at 1 P. M.          |
| 8    | 69        | " 83-100  | 81       | " 78-100  | E.    | Rain.                         |
| 9    | 67        | " 84-100  | 87       | " 82-100  | S. E. | Rain, 83-100 of an inch.      |
| 10   | 64        | " 84-100  | 70       | " 84-100  | N.    | Cloudy.                       |
| 11   | 62        | " 85-100  | 67       | " 82-100  | N. W. | Cloudy.                       |
| 12   | 63        | " 78-100  | 76       | " 81-100  | N. E. | Fair.                         |
| 13   | 62        | " 78-100  | 80       | " 75-100  | S.    | Fair.                         |
| 14   | 63        | " 86-100  | 78       | " 84-100  | E.    | Fair.                         |
| 15   | 61        | " 93-100  | 79       | " 87-100  | N. E. | Fair.                         |
| 16   | 60        | " 89-100  | 77       | " 87-100  | N.    | Fair.                         |
| 17   | 63        | " 85-100  | 73       | " 79-100  | N. E. | Fair.                         |
| 18   | 63        | " 74-100  | 75       | " 64-100  | N. W. | Fair.                         |
| 19   | 61        | " 72-100  | 76       | " 68-100  | S. W. | Fair.                         |
| 20   | 60        | " 64-100  | 78       | " 64-100  | N. W. | Fair.                         |
| 21   | 61        | " 78-100  | 88       | " 78-100  | S. W. | Fair.                         |
| 22   | 62        | " 84-100  | 77       | " 87-100  | S. E. | Cloudy. [30-100 of an inch.   |
| 23   | 66        | " 82-100  | 77       | " 75-100  | S. E. | Cloudy—sprinkle—rain at night |
| 24   | 67        | " 68-100  | 78       | " 65-100  | W.    | Fair—some flying clouds.      |
| 25   | 59        | " 71-100  | 82       | " 67-100  | W.    | Fair.                         |
| 26   | 59        | " 70-100  | 82       | " 74-100  | W.    | Fair—some clouds.             |
| 27   | 58        | " 72-100  | 86       | " 68-100  | S. W. | Fair.                         |
| 28   | 64        | " 64-100  | 88       | " 60-100  | W.    | Fair.                         |
| 29   | 60        | " 72-100  | 74       | " 74-100  | N. W. | Fair.                         |
| 30   | 48        | " 76-100  | 76       | " 76-100  | W.    | Fair.                         |

22 Fair days. Quantity of Rain 3 inches and 16-100. Wind East of N. and S. 11 days. West of do. 14 days.

ERRATA.—Page 640, line 14, for *reviewing*, read *viewing*; page 644, line 7, for *irritatory*, read *initiatory*; page 645, line 4, insert *from* between the words "emanates and small-pox."



# SOUTHERN MEDICAL AND SURGICAL JOURNAL.

---

Vol. 3.]

NEW SERIES.—DECEMBER, 1847.

[No. 12.]

---

## PART I.—ORIGINAL COMMUNICATIONS.

### ARTICLE XLVI.

*Contributions to Practical Midwifery, with Cases occurring in Obstetrical Practice.* By JAMES M. GORDON, M. D., of Lawrenceville, Georgia.

The function of reproduction, has justly been considered, by all civilized nations, as the most important, attached to the animal economy. It is, then, not at all wonderful, that a very respectable portion of the talents, engaged in the profession of Medicine, should have been enlisted, from the earliest existence of the healing art, in guarding against the evils attendant upon pregnancy—relieving the suffering, and averting the dangers of parturition. However diversified the character, and changes of constitution, to which the human female is susceptible, the instances are rare, where during pregnancy, the general health is not impaired; and many cases are productive of extreme anguish and suffering, and attended by the most fearful consequences, and even death itself. Fortunately for mankind, the function of parturition is, in a vast majority of cases, naturally and safely performed, and require but little interference on the part of the obstetrician. But cases do occasionally occur, calculated to strike the stoutest hearts with terror, and demand timely and efficient aid. The object of the present communication, is to detail a few of those anomalous cases, which are of such imminent danger to the patient; and render the most prompt and appropriate treatment, indispensably necessary.

**PUERPERAL CONVULSIONS.**—There is perhaps no question connected with obstetric art, that has been subject to a greater contrariety of opinions, than the one under consideration; and strange to say,

among the most distinguished accoucheurs of the day, it yet remains a subject for controversy. All are, however, agreed, as to its being a subject of vital importance, both to the medical profession and to the public. The supervention of convulsions, is undoubtedly the most formidable accident that can possibly happen to the parturient female.

To review the opinions of the various obstetrical authors, as regards the pathology of puerperal convulsions, would perhaps be an unnecessary consumption of time, as doubtless most of the readers of the Journal are familiar with them. In regard to the treatment, it is sufficient to say, that however formidable the disease may be, it is commonly successfully treated, when that treatment is based, as we believe upon its most *enlightened pathology*.

The recent valuable discoveries of Dr. Marshall Hall, in relation to the physiology of the nervous system, has, in this, as well as many other diseases, been as the dawning of a new era, in the history of Medical Science. And to Dr. Robert Lee, the medical profession owes a debt of gratitude, that should be commensurate with its existence, for his indefatigable skill and industry, in the discovery and demonstration of the nervous system of the uterus. The brilliant discoveries of these distinguished physiologists and co-laborers in Medical Science, we would hail as the harbingers of valuable pathological reform, succeeded by more satisfactory practical results *generally*, but more especially in the treatment of puerperal diseases.

Females of whatever age, peculiarities of constitution, idiosyncrasy or temperament, are universally liable to convulsions, either during first, or subsequent pregnancies.

In our very limited observations and experience, we have found that those most obnoxious to attacks, were individuals of delicate constitutions, and predominant nervous temperament, and in first pregnancies. It is known that there is more irritability of the system, during the first than any subsequent pregnancy. Every case that has come under our immediate notice (of which we have met with four in the past four years) have been of *prima para*.

*Causes.*—If in this division of our subject, we adopt the general method of classification, into *predisposing* and *exciting* causes, it will be barely necessary to advert to the principles laid down in a foregoing part of this article. It has already been observed, that co-existent with a first pregnancy, there is always a highly excitable state of the nervous system. This excitability obtains in subsequent

pregnancies but in a diminished degree. The reasons for this state of excitability, are obvious and easy of comprehension. From the period of conception, important functional changes take place. There is a total suppression of the catamenial function, the most important secretory act, incident to the preservation of female health. In lieu of the abolishment of this absolutely necessary function, a new system is established—a new being is created. Where once there existed but one system, simple and easily sustained, there now exists two distinct systems, of more complication, different, and to some extent antagonistical in character; one of which is undergoing continual change, from growth and development. The manner in which these various changes produce this *nervous irritability*, in the present extent of our knowledge, we are unable to explain. The remote or predisposing causes of puerperal convulsions, may be comprehended in few words:—That pregnancy exists, or the presence of the *fœtus in utero*.

*Exciting Causes.*—The principle exciting causes we believe to be, in addition to the peculiar condition of the uterus itself, from the highly excited state of its nerves, and the transmission of this excitement, to the spinal marrow; other sources of irritation, acting through the excitor nerves, on the spinal marrow,—such as the presence of crude and indigestible food; constipation, or a morbid state of the bowels; vesical irritation, produced by over-distention of the bladder, and perhaps depraved quality of the urine; excessive grief, or mental anxiety; sudden shocks; great muscular exertion; hemorrhage, &c.—all acting upon the spinal marrow and its excito-motory system of nerves.

*Pathology.*—From the premises previously laid down, it will be readily perceived that it is to the spinal division, of the nervous system, that we most anxiously look, for a solution of the mysteries, that have heretofore surrounded the pathology of this intricate subject. It is on the spinal marrow alone, that all the actions in parturition, whether healthy or morbid, essentially depend. We include in the term *spinal marrow*, all that portion of the spinal cord which does not preside over the functions of volition and sensation, including the spinal marrow *proper*, together with the corpora quadrigemina and medulla oblongata. Physiological experiments upon inferior animals, have satisfactorily demonstrated the fact, that irritation of the spinal marrow *will* produce convulsions. It has also, in like manner, been proven, that no amount of irritation of the brain, or cerebellum,



is adequate to the production of those effects. Irritation of the brain, with the finest instruments, and by the most subtle chemical agents, produce no motions, either voluntary or involuntary, though the slightest volition moves the whole body; but on the contrary, irritation of the spinal marrow, by the point of a needle, or a drop of acid, excites the most intense spasmodic actions. In consequence of these established facts, we have been irresistibly forced to abandon the most commonly received opinion, in regard to the pathology of convulsions, in the puerperal state, i. e., that they are the legitimate result, of either primary or secondary cerebral congestion. That this pathological view of the subject is erroneous, requires but thorough investigation to be established beyond the possibility of doubt. *First*—from direct experiments of Drs. Hall, Magendie, and others, we have seen that cerebral irritation will not produce convulsive action. This fact alone should settle the question. *Secondly*—If simple vascular pressure upon the brain, causes convulsions, we should have them occurring much more frequently, during the second stage of labour, than at any other time. But we presume this will not be borne out as a fact by general experience. Patients frequently fall into convulsions before labour has actually commenced; and at all events in a greater proportion of cases, before the arrival of its second stage. During the second stage of labour, and especially in the last expulsive efforts, the uterine, together with the general spasmodic muscular contractions, cause to be poured into the system, an additional quantity of blood from the veins and arteries, which is driven upon the cerebral organs; and if simple cerebral vascular pressure caused convulsions, it would be precisely at this period we should most frequently witness their development.

So far from this being true, every experienced practitioner knows that not uncommonly they are first exhibited after the completion of the *third* stage of labour.

Now we would not have the hardihood to assert, that during the second stage of labour, it is impossible for convulsions to appear, simultaneously, with sanguineous or serous effusion, or during the existence of vascular congestion of the brain. But on the contrary, we aver that some one of these morbid states are almost invariably co-existent with convulsions, but they are the *effects* and not the *cause* of the disease.

For the sake of argument alone, we will for a moment suppose, that cerebral congestion or effusion may be the primary cause of con-

vulsions ; then, and if that supposition was an established pathological fact, it would be to the spinal marrow, finally, that we should be compelled to direct our attention for a satisfactory explanation of its pathology. We cannot conceive it possible, for there to exist any considerable degree of pressure upon the brain, without producing corresponding counter-pressure upon the medulla oblongata, which we have seen is a sufficient cause for an attack of convulsions. The most rational presumption is, that after the onset, the consequent cerebral oppression by the counter-pressure upon the medulla oblongata, tends, in a considerable degree, to a continuance of the malady. It is also a well verified fact in the paroxysms, that there is spasmodic closure of the glottis, and thus venous congestion of the brain, and medulla oblongata, is produced by the interruption of the free return of blood from the head. As certainly as effect follows cause, do we have the effusions so uniformly observed in *post mortem* examinations, and described by almost all authors, as the immediate and exciting cause of the disease. Some authors believe the principle cause, of this cerebral oppression, upon which they suppose the disease to depend, is produced by the pressure of the gravid uterus upon the abdominal aorta. It will however be observed, that at the same time it presses with equal, if not superior force, upon the inferior vena cava, thereby removing the pressure of the blood, from the inferior extremities, and thus obviating, rather than assisting, in the production of cerebral congestion. The most obvious and rational causes, in our opinion, are in addition to the increased quantity of blood, both arterial and venous, that is thrown into the system, in consequence of the compression of the arterial and venous trunks, by the irregular spasmodic muscular contractions, and its natural tendency to flow to the brain, the rigidity of the muscles of the neck, and the closure of the glottis, by spasm, in the convulsive paroxysms retarding or preventing the return of blood from the head. In this way, we believe it is not only possible for convulsions to be established—nay, we are certain, that they are frequently continued by the operation of these causes. The brain, by the emotion, the result of congestion, becomes an excitor of the spinal marrow, through the medulla oblongata, and it is only in this way, that the brain exercises any power or control over spinal actions.

Convulsions are most frequently brought on, by the changes necessary to take place in the uterine system, antecedent and preparatory to the commencement of labour ; or, prior to this, the mere presence

of the fœtus in utero may give rise to them. It has also been stated upon good authority, that the presence of a *dead fœtus* is much more likely to produce convulsions than a living one, as it is a much stronger excitor of the reflex actions. When once they have been established, comparatively slight causes are sufficient to effect a return of the most aggravated symptoms—such as the pressure of the bag of waters upon the os tincæ, and os externum, or after their discharge, of the fœtal head upon the same parts. The introduction of the hand, as in turning, or even the mere act of making a vaginal examination, is sufficient to bring on a convulsion. Intestinal irritation, particularly of the rectum,—as in cases of worms, or a collection of hardened scybalæ, or the excessive action of cathartic medicines, particularly alœtic preparations,—are prolific sources of convulsions, in the highly excitable state of the nervous system, incident to pregnancy, labour, or the puerperal state. Other less common causes of irritation we omit to mention, as it would extend this article much beyond its designed limits; and in the conclusion of this division of our subject, by way of recapitulation, it will only be necessary to say, in a few brief words, what has already been repeated in substance; that labour is a function of the excito-motory system, and the true puerperal convulsion can only occur, when the cerebral organ of this system, the *spinal marrow*, has been acted on by an important class of its incident nerves, in a very excited condition. The result of this action, or *irritation*, (as it is more properly termed,) is produced, as we have seen, in one of two given methods: either by direct action upon the spinal marrow, or indirect irritation, communicated to it through its incident excitor nerves. That this is the *true* pathology of this frightful and dangerous disease, we entertain the most honest convictions. They are the same adopted early after the outset of our professional career, and daily experience in professional toil, only tend to confirm us in the correctness of the position.

*Treatment.*—In a plethoric subject, with fulness of the vascular system, we employ *blood-letting*, carried to a sufficient extent to protect the brain from the injury it might otherwise sustain from congestion, and the dangerous results of effusion, during the convulsions; and also to produce a decided sedative effect upon the spinal marrow. For this purpose, the blood should be rapidly drawn, in a bold stream, from a large orifice, so as to make a very decided sedative impression upon the nervous system, at the onset of the attack. By this means the brain will be amply protected from congestion and effusion, and



the medulla oblongata defended from the perilous effects of mechanical counter-pressure—an object of great importance, and one that should demand especial consideration.

This remedy, however valuable in itself, is susceptible of being greatly abused, either by excess, or its employment in cases, where it should have been scrupulously avoided. For we are clearly of opinion, even from our very limited observation, that but comparatively few cases depend upon plethora, or vascular fulness, but on some irritation independent of either of those pathological conditions. In those subjects, characterized by the nervous temperament, and delicacy of constitution, and where the local irritation is situated in the uterus, stomach, or rectum, blood-letting to any considerable extent, cannot otherwise than prove highly detrimental, as, instead of exerting a sedative influence upon the spinal marrow, it actually becomes a stimulant to that organ. Blood-letting, in its action upon the spinal marrow, is greatly modified by the condition of the circulation. When the system is in a state of great vascular fulness, it exerts a decided sedative influence over spinal action. On the contrary, in a state of anæmia, it becomes a positively spinal stimulant. It is only when from the violence of the convulsions, the brain is in imminent danger of permanent injury, that its employment is to be tolerated in weakly nervous females, or an anæmic condition of the system.

After appropriate blood-letting, the next important indication is to procure free *alvine evacuations*, if the least suspicion exists, that there is contained in the alimentary canal, any foreign matter that may become a source of irritation. For this purpose, a combination of calomel and croton oil, is perhaps the most valuable remedy. The smallness of the dose, when compared with its certainty of effect, and great activity, together with the comparative ease with which it can be administered, renders it particularly applicable. As the patient is frequently in a state of insensibility, ten grains of calomel, and one drop of croton oil, may be placed on the tongue, and with the saliva it finds a ready entrance into the stomach. The dose should be repeated, if necessary, and assisted by stimulating enemata, till full and free evacuations are produced.

Cold applications to the head, in the form of douche, by cold water poured from a height, from the mouth of a pitcher, in a continuous stream, upon a central point of the cranium, and continued a sufficient length of time to make a serious impression upon the ner-

vous system, will be found to be productive of great benefit. *First*, by promoting a free return of blood from the brain, and thereby assisting in the prevention of congestion, and effusion and its fearful consequences. *Secondly*, by allaying nervous excitability, upon which the continuance of the paroxysms depend.

The impression of cold should be kept up, by the application of a bladder of pounded ice to the head, or if the season is such that it cannot be procured, then napkins frequently wrung out of the coldest water, may be substituted.

It is also recommended by very high authority, that during the convulsive seizure, cold water be freely dashed in the face, in order to excite inspiration, by producing a dilatation of the glottis. Dr. Denman records an interesting case, in which a convulsion came on at the accession of every labour-pain, in which he was successful in warding off the attacks, till the termination of labour, by simply sprinkling the face with cold water with a bunch of feathers, on the return of each pain. If, however, it should not prevent the return of the convulsions, it is reasonable to believe that it may be of benefit in occasionally relaxing the glottis, and causing inspiration, which has the effect to diminish the quantity of venous blood in the system, thereby removing a considerable amount of vascular pressure from the nervous centres. Not having used the remedy, we cannot speak of it as from experience, advised.

*Revulsives to the spine*, will be found of the utmost importance, to relieve the nervous excitability produced by an irritable state of the uterus, and transmitted to the spinal marrow by its nerves. Dr. Robert Lee, has shown that the uterus is more abundantly supplied with nerves, than any other abdominal organs. His dissections prove, that the uterine nerves are derived, principally, from the third and fourth sacral nerves, and hypogastric ganglia. They also show a continuity of nervous fibres, to a newly discovered ganglia of the uterus, vagina, and ureters. The branches of the recently discovered ganglia unite, in various directions, with the inferior mesentery plexus, to give off the hæmorrhoidal and spermatic nerves, which, descending from the broad ligaments, are distributed upon the uterus. The frequent occurrence of small ganglia, in the course of the newly discovered nerves, and their accompaniment by injected blood-vessels, such as are peculiar to, or at least closely analagous to those that attend the course of ganglionic nerves, leave no doubt of their being to some extent a ganglionic system. Without digressing from

the subject, to engage in the discussion of the physiology of the nervous ganglia, we would but observe, that the frequent occurrence of these various ganglia, in the distribution of the uterine nerves, forming so many distinct centres for the radiation of nervous influence, whether normal or abnormal, and modifying the symptoms of puerperal diseases, explain these phenomena.

But to return more immediately to our subject. Every practitioner is aware of the promptness with which a sinapism to the sacrum arrests labour-pains, and from a natural course of reasoning, we should expect spinal revulsives to produce a like salutary effect in puerperal convulsions. The spinal irritation being in the two cases identical, differing only in degree of severity. Experience, the most unerring of all teachers, has proved the correctness of these deductions. Cases of puerperal convulsions, have been cured by the use of revulsives to the spine alone, after other modes of treatment had been unsuccessfully exhausted.\*

In the conclusion of these observations on the treatment, it becomes necessary to mention a remedy of more doubtful effect, and one that has been most unceremoniously condemned on the one hand, and its value as highly estimated on the other. We allude to the administration of *OPIMUM*. Whatever may have been the opinion of others, as to its merits, or demerits, we most unhesitatingly declare it to be the most effectual therapeutical remedy, in the treatment of this disease. The discrepancy of opinion, among the profession, in regard to its value, must have arisen from one of two causes. *First*, from improper regard to the previous reduction of vascular fulness. *Secondly*, the small quantity of the article given. Opium is adapted to the exercise of either a stimulant or sedative effect on the nervous system. The effect being modified as to whether it is given in minimum or maximum doses, or in a plethoric or anæmic condition of the system. In fulness of the circulation, it is a stimulant to the spinal marrow, while in anæmical cases, or after sufficient vascular depletion, it acts as a decided sedative to that organ. The same is true of its effects, as given in large or small doses: if even in a state of anæmia it be used in small doses, it becomes a spinal stimulant—whereas, if administered in full and effective doses, the effects are those of a sedative. If opium be administered in moderate doses, or in a full state of the circulation, previous to appropriate blood-letting, an aggravation of all the symptoms may be reasonably expected;

\* See London Lancet, vol. 2d, for 1844. Page 386.



but if prescribed in full and efficient doses, subsequently to active vascular depletion, and other appropriate auxiliary treatment, it is capable of exerting most salutary and happy effects. It is indeed the heroic remedy—the sheet-anchor of our hopes, in many cases of this much dreaded disease.

The beneficial effects of this potent remedy may be greatly enhanced, by a combination with some of the more valuable articles of the class of anti-spasmodics—assafœtida we believe to be the best. Since the discovery of the reflex functions of the nervous system, anti-spasmodics are much less used than formerly. The treatment more generally being directed to the removal of irritation from the various excitor surfaces, so much reliance is not placed on the relief of spasm, by the different classes of nervine medicines. But in cases where the causes are unknown, or involved in mystery and obscurity, they are of important benefit. In puerperal convulsions, where the exciting cause is to be found in the existence and presence of the fœtus in utero, and delivery, the only effectual permanent remedy. Assafœtida may be given in combination with opium, with great advantage. To some extent this assists the latter article in diminishing the excitable state of the spinal marrow and its nerves, and thus acting the part of a sedative of the reflex function. We have commonly used them agreeably to the following formula :

Tinct. Opii., . . . . 60 minims.

“ Assafœt., . . . . 3ii.

to be taken every two hours, till the convulsions cease. It may require, in the most obstinate cases, what might otherwise be considered, a very extravagant quantity of those articles. In one case we gave to the amount of ten grains of opium, and two scruples of assafœtida, before the convulsions were finally arrested. But the judicious accoucheur will not so much regard the *quantity* as the *effect* of his remedies, when positively indicated. And when the indications in the treatment of puerperal convulsions are fulfilled in obedience to the foregoing principles, we can most confidently assure the profession, that they will rarely be disappointed in realizing the most happy practical results.

There is an important question, however, to be considered, in relation to the free use of opium pending labour. Does the administration of full doses retard, or otherwise modify, the regular progress of labour? On this question, there exists great discrepancy of opinion. By some writers it is contended that it retards, and by others that it

accelerates labour. The true physiological effects will be ascertained to be, that in puerperal convulsions, it actually and indirectly hastens labour, by arresting the convulsions, (which interfere with the regular parturient efforts of the uterus,) and allowing its uninterrupted progression; independent of this effect, opium exercises no control over parturition.

CASE I.—Mrs. B——, aged 25, of nervous bilious temperament, in the eighth month of utero-gestation with her first child,—was attacked June 13th, 1843, with spasmodic twitching of the muscles of the whole body, which gradually increased in severity for twenty-four hours, when we were requested to visit her. Found the paroxysms recurring about once every half hour; her general health bad—indeed there existed a decided state of anæmia. She complains of pain in the lumbar and sacral regions, accompanied with severe head-ache. *Prescription*.—A cathartic, and a blister applied to the lower portion of the spinal column—Tinct. Opii. 40 minims; Tinct. Ass. 3i.; to be taken and repeated *pro re nata*. Directed to remain quietly in bed, and free from noise and confusion. The improvement was gradual and perfect, and she was delivered at the regular period of a living and healthy fœtus.

CASE II.—Mrs. O——, in her first pregnancy, 20 years of age, of middle stature, and nervous bilious temperament, was suddenly seized with convulsions on February 19th, 1844. We saw her soon afterwards, and learned from her husband, that she had arrived at or near the full period of gestation. She had previously been in delicate health. Complains of severe pains in the loins and head, and also says that her bowels are constipated. Prescribed venesection to 20 oz., and a cathartic composed of 10 grains of Calomel, and one drop of Croton Oil. The purgative acted freely in two hours, and the convulsions continued. As her face was very much flushed, a vein was again opened, and the blood suffered to flow again to the extent of 20 oz. Labour had not commenced. Notwithstanding the copious blood-letting, and active purgation, the convulsions continued, and evidently increased in violence. We then gave her Tinct. Opii. 60 drops; Tinct. Assafœt. 3ii.; which exerted a most happy effect. The convulsions ceased, and she fell into a sound sleep, which was only interrupted, after the expiration of an hour, by occasional moanings, and other evidences of pain, which we suspected to be true parturient pains, as they recurred at regular periods. The truth of the suspicion

was verified by a vaginal examination, and the os tincæ found dilated to the size of a dollar. The presentation was natural, and the labour proceeded regularly, and without the slightest interruption, for six hours; but during the last expulsive effort, and just as the foetal head was emerging, she fell into a most violent convulsion, which continued for near half an hour. She was entirely unconscious of the birth of the child, (a living one, and rather above the ordinary size,) and remained in coma for an hour.

The placenta had not yet been detached, and as there was considerable hæmorrhage, the first opportunity of only a partial rally of the system, was anxiously sought to remove it. The introduction of the hand, for that purpose, brought on another convulsion, equally as severe as the former, but not of so long continuance. Free vesication was produced upon the sacrum, by means of Granville's counter-irritating lotion, and as soon as deglutition could be performed, she was ordered Tinct. Opii. 60 minims; Tinct. Assafœt. 3ii.; after which there was no return of the convulsions, and she rapidly recovered without an unfavorable symptom.

CASE III.—Mrs. Mc——, aged 14, of nervous sanguine temperament, in the eighth month of her first pregnancy, was attacked with convulsions. She was of small stature, and delicate conformation, and had previously been in wretched health. At the time of her attack, she appeared in a state of great debility, and there was general anasarca of the whole body. On our visit, we found that she had just recovered from the fourth paroxysm. Labour had not commenced. Ordered an enema, and as her face was considerably flushed, and she complained of severe head-ache, a vein was opened, and 10 oz. blood drawn; sinapism to the sacrum, and cold douche to the head. The bowels having been sufficiently evacuated by the enema, a purgative was omitted, and she was given Tinct. Opii. 60 drops; Tinct. Assafœt. 3ii.; after which, there was no return of the convulsions for three hours, and we left her apparently quite comfortable, with strict injunctions to be immediately sent for, if they returned.

Eight hours after leaving her, we were again summoned in great haste, and were informed that the convulsions had returned with redoubled violence. On our arrival, we ascertained that she had suffered three paroxysms, and was then in the fourth, a most violent convulsion;—indeed she now (at 7 o'clock, P. M.) seemed to be in *articulo mortis*.



Discovering, however, some abatement in the symptoms, we determined to persevere in our efforts for her relief. The countenance was very much flushed, and there existed great turgidity of the cervical and cerebral vessels. Venesection to 12 oz., and Granville's counter-irritant applied to the sacral region, so as to produce free vesication. Continue cold applications to the head.

Deglutition being impracticable, we administered, per annum, Tinct. Opii. ʒiii. ; Tinct. Assafoet. ʒss. ; which was almost immediately returned, and repeated, as we considered it the only reasonable hope for success. Notwithstanding the activity of the treatment, the convulsions continued, without intermission, for seven successive hours, until 2 o'clock, A. M., when, to our great gratification, evident signs of improvement were manifested. So soon as deglutition became practicable, we gave her 1 gr. Sulph. Morphia, which effectually controlled all convulsive action, and she fell into a profound sleep, which lasted four hours.

At 6 o'clock, A. M., from the writhing, and other indications of pain, we suspected the commencement of parturient action. The correctness of the supposition was verified, by a manual examination : it was ascertained that the stage of dilatation had commenced. It was also at the same time discovered, that the labia were enormously distended, by serous accumulation, which was immediately relieved, by free puncturation with a lancet.

Although she was wholly unconscious of passing events, and exhibited satisfactory evidence of being fully under the influence of opium, yet the labour progressed regularly, and at 6 o'clock, P. M., (just twelve hours after the commencement,) she was delivered naturally of a very small dead foetus, and from the cuticular disquamation, and insipient putrefaction, we inferred that for several days life had been extinct.

After delivery, she remained in a state of coma for twenty-four hours—and partial mania for the four subsequent days—which gradually subsided under the use of mild laxatives, with low diet, and confinement to a darkened apartment, free from noise and confusion. Her recovery was perfect, and as rapid as could have been anticipated, considering the great exhaustion of strength, and of the vital powers.

CASE IV.—Dec. 6th, 1846. Mrs. B——, 20 years of age, of nervous bilious temperament, in the eighth month of her first pregnancy, was attacked with convulsions, of violent character, which

returned at intervals of one or two hours : each renewal of the attack being more severe than the former. We were requested to visit her, but considerable time had elapsed since the attack, as she lived at the distance of eighteen miles. She had previously been in the enjoyment of excellent health, and was of a full habit. When we arrived, she was comatose, and was informed by a midwife in attendance, that she had had frequent convulsions during the afternoon and night. She was immediately bled to 30.oz. ; and 10 grains of Calomel, and one drop of Croton Oil, placed on the tongue, which in the space of two hours, by the assistance of stimulating enemata, brought away large quantities of dark bilious evacuations. It was also ascertained, that she had not passed any urine for twelve hours. The introduction of a catheter, was followed by the discharge of about twenty ounces of high-colored urine, of exceedingly strong odour. The convulsions continuing to recur, a vein was again opened, and 20 oz. of blood withdrawn ; a blister was immediately drawn, upon the sacral region, by means of Granville's counter-irritant ; and as she had vomited several times, it was thought best to omit the use of assafoetida, lest it might again produce nausea and vomiting, and to use opium in its most concentrated form. She was therefore given one grain of Sulphate of Morphine, which was effectual ; and she fell into a deep sleep, which continued five hours, and from which she was aroused by pains of a parturient character. It was ascertained that labour had commenced, and the first stage slowly advancing. So soon as consciousness was restored, she was questioned as to when she last felt the foetal movements ; to which inquiry she replied, she had not been sensible of its motion in two or three days. The labour advanced slowly, but favorably, to the completion of the first stage ; and also through the second, to the engagement of the head in the inferior strait, when it suddenly became arrested, and symptoms of an alarming nature presented themselves. The patient's strength appeared entirely exhausted—a death-like pallor of countenance, cold extremities, pulseless at the wrist, were the alarming symptoms now developed : nothing appeared certain but death.

At this critical moment, no time was to be lost—immediate delivery seemed the only hope. The forceps, which were at hand, were applied ; and the delivery readily effected. The foetus was of common size, and in an advanced stage of putrefaction.

After the completion of the delivery, the most active exertions were required to produce a reaction, to avert dangers that threatened cer-

tain destruction. The most active diffusible stimulants were freely administered, and assisted in their operation by sinapisms, and artificial heat, by bottles of warm water placed to the feet, and around the body, in bed. The remedies were eventually successful, although for an hour she appeared as one dead.

Her recovery was tedious, and for a considerable time imperfect. She had occasional returns of convulsions, for a fortnight subsequent to delivery, but which were uniformly promptly arrested, by a combination of opium with assafœtida.

In addition to all the other difficulties, she suffered immensely from phlegmasia dolens, which, at different periods, attacked each of the lower extremities, and received the necessary attention. Her recovery, although tedious, has been perfect, and we are happy to say that she is now in the enjoyment of excellent health.

REMARKS.—In a very brief manner, we have disposed of this important subject, and are aware of the many imperfections in our remarks upon it; but we would indulge the hope that physicians of more eminence and talents, with enlarged experience, may be induced to take hold of, and thoroughly investigate, the subject of spinal physiology, and its relations to pathology, and to practice *generally*; but especially in the treatment of puerperal diseases. In every department, diligent inquiries should be instituted, in the investigation of the derangements and diseases of the spinal system, in order that a successful method of treatment may be adopted. We cannot but indulge the hope, and belief, that the time is not far distant, when the treatment of spinal nervous diseases, based upon the knowledge of Dr. Hall's valuable discoveries of their physiology, will lead to most gratifying and successful results in practice.

We cannot but regard these discoveries, as the most valuable acquisitions to the medical profession, in modern times, and worthy to be ranked with the discovery of the Circulation, the Vaccine Virus, and the Stethoscope.

---

ARTICLE XLVII.

*Malignancy.* By WESLEY C. NORWOOD, M. D., of Cokesberry, S. C.

In a former communication, I noticed the want of precision, and the inappropriateness in the various terms used to express the above condition of disease. I hope I offered sufficient reasons, to show



that they did not denote, with any clearness, the great variety and forms of disease with which malignancy was associated. Nervous, was one of the terms alluded to, as improper; and cited as an example, the great mildness of catarrhus epidemicus, of certain periods, on the one hand; and typhus carcerum on the other. The former, is often very extensive in its range, and as non-malignant as it is widely prevalent. The latter is always malignant. That typhus putridus did not define or characterize it, as it embraces two species or varieties: Putidus proper, and Synochus, which differ as widely as the poles, in their degree or violence. I stated more fully, my objections to congestion—it being an incident, and perhaps never a primary affection. I further stated, that I considered congestion a remedial process, induced by the vis medicatrix naturæ, or instinct. Also, that if the blood were to remain in the capillaries, and superficial vessels, in syncope, there would, in all probability, be no cases of recovery; that in purely malignant cases, the condition of the brain, and nervous system, not being changed, where there was suffusion, engorgement, or congestion of the superficial vessels, death would invariably result. In support of this assertion, I alluded to the spotted fever of the north—typhus syncopalis. Typhus syncopalis, is not a synonyme for typhus putridus. Typhus gravior and spotted fever, are not convertible terms: they have both been called spotted fever. Typhus syncopalis, is a well marked and perfectly defined nervous fever, and associated perhaps with passive inflammation of the brain. There is a mottled appearance that occasionally accompanies typhus gravior, which has given rise to the name spotted fever; but with as little correctness, as black or red tongue, as prefixed to many varieties of fever of the present day. In a previous communication, on page 399, typhus gravior, was put down instead of typhus syncopalis, in parenthesis. The mottled appearance, when in excess, indicates genuine malignancy. I also gave a great number of the apparent symptoms of malignancy, and stated, that death was the invariable result of some of them, when they singly appeared, and it followed from their plurality, in other instances. Again: that symptoms which belonged to, and were characteristic of the nosological place and relation of the disease, were malignant, when they appeared out of their regular order, in any considerable number, or were marked by unusual severity. That frequently a single symptom, of the last stage of disease, indicated extreme malignancy, when it appeared with severity, in the incipient or forming stage. I gave

an example in the case. His disease was ushered in, with mild or pleasant, but striking delirium. No other symptom of severity appeared, either in the nervous sanguineous, or secernent and absorbent systems. That malignancy consisted in exhaustion of the energies of the vital functions, and of symptoms not peculiar to the disease. That malignant diseases were never protracted, by ordinary treatment, but were brought by such treatment to a suddenly fatal issue; while obstinate and severe diseases may be, and frequently are, protracted, by injudicious treatment. That malignant cases were not palliated, and would not bear reducing agents or antiphlogistics, but that obstinate and severe cases might. In cases of periodicity, I did not believe that quinine and bleeding were indicated in any case, at the same time, in the stage of reaction or exhaustion. That a great many of the cases in which venesection was practiced, were cases of lethargy, coma, insensibility and convulsions, accompanied with torpor of the brain, and nervous system; and unaccompanied by exhaustion, the peculiar and striking feature, in all cases of malignancy. And something was given in the way of example or illustration, where a large quantity of blood was taken, and the little impression made at the time on the disease, and the freedom of the system from present shock, or immediate injury from such excessive draining and waste of the vital fluid. I also gave a few cases illustrative of the success of an opposite system of treatment—(Medical Student); also, my disbelief of inflammation supervening in important organs, and observing the periodical course of the disease. That many of the reputed cases of inflammation, were believed to be nothing more nor less than extreme irritability, frequently accompanied with neuralgic pains; and that the peculiar tenderness of the muscles of the epigastric, and other regions, on pressure, was purely nervous. In colic, we often find the muscles of the abdomen exquisitely tender on pressure, where the sanguineous function was regular and undisturbed, during the whole course, or paroxysm, and often an entire subsidence of the pain. The fact is, in regard to colic, I believe it to be a purely neuralgic affection; and that there is no such thing as *bilious colic*. That the disordered state of the biliary secretions, is the effect of the treatment, instead of being the cause of the disease; and the fever, if any should follow, is merely irritative and symptomatic. That in colic, as in other diseases, there is torpor in one set of cases, and irritability in another; but torpor more commonly predominates. Even *colica rachialgia*, I believe to be neuralgic, in a greater or less

degree : else, whence the nervous tremors paresis or semi-paralysis. The name itself is indicative of such conclusion.

I further stated, that the general condition of the system was not altered by the supervention of any local affection. If it were caumatoid, the local could not be atonoid : if it were atonoid, the local could not be caumatoid. I spoke something in regard to indications. As I expect to treat of indications, in a separate article, I shall omit saying any thing on that head at present. All the assertions and illustrations that have been made, are in reference to the apparent symptoms of genuine malignancy. I have witnessed every one of them in pneumonitis typhoides, which was the disease I selected to give examples from. I have seen them frequently in other diseases. I alluded to two symptoms of malignancy in cholera infantum, that are not embraced in the above declaration.

The following remarks are made in reference to diseases that are insidiously malignant—or where the symptoms of malignancy are not apparent; and for which cases we have no language to express our ideas, or, to use a nautical phrase, in which there is not “breeze enough to steer by.” We are frequently called to cases, in which there are no symptoms of urgency, no particular derangement of the functions of the brain and nervous system : the sanguineous but slightly affected ; the pulse, being morbidly natural or slow ; the biliary and intestinal secretions indicated but few symptoms of morbid action ; no unusual appearance of the tongue ; no foulness or collection of sordes on the teeth : where emetics and cathartics operate kindly ; where stimulants, tonics, and narcotics, produce none of their deliterious effects ; and when the medicines administered, are not followed by harsh or drastic effects. But still the symptoms do not yield, but grow worse, so gradually and imperceptibly, that we cannot say the patient is any worse, unless we compare the symptoms, not of one day, with another, but by a space of two or three days—in which the by-standers do not consider the patient in any danger ; and if you attempt to enforce it, they treat it with the utmost incredulity, and when he dies, will be astonished, and attribute his death to negligence on the part of the nurse, or to mal-practice and ignorance of the physician. This sort of cases will suddenly and without any assignable cause, grow worse on the seventh, ninth, fourteenth, or twentieth day, and many of the symptoms of apparent malignancy will supervene—or the symptoms common, and properly belonging to the disease, will be unusually increased, or materially



aggravated, and death follows in from twelve to thirty-six hours. Although at the outset, there are no symptoms which clearly mark and indicate such issue, still to the practised and observing, there is something in the general appearance of the patient, that denotes danger, or a "hidden ambush," and is a source of much uneasiness to the physician in attendance. These are the cases in which the ignorant, the careless, and unobserving physicians forever blunder—in which they promise certain, if not a speedy return to health: and their patients are always reputed to die in some unheard of and remarkable manner. I hold, and maintain, that there is something in these cases, which a skilful and closely observing physician will detect—a "*tout ensemble*" to the other cases of malignancy—where the symptoms are striking and apparent: that if type, pulse, stage, crisis and diathesis, are thoroughly studied, and properly understood, and the peculiarity of the endemic or epidemic, particularly observed, and the general regularity and irregularity which it observes, in its rise, progress and decline, noted, there will be little or no danger of error in diagnosis, or prognosis, however much the physician may be unable successfully to treat the disease. These are the cases and circumstances in which the skilful and observing have the advantage over the ignorant, unskilful, and unobserving practitioner.

The standing and popularity of a physician, depend as much on correctness of prognosis, as of diagnosis. To discover this sort of cases, requires close observation and study; but when properly understood, the prognosis and diagnosis, the indications and treatment will be unincumbered by error and disappointment.

Mr. W. was more or less dyspeptic; he had one or two chills; whether they were followed by much fever, or frequency of the pulse, I do not now recollect. I was called in council. There was not a single symptom of urgency or severity, with the exception of occasional and irregular paroxysms, of epigastric sinking or uneasiness, and a frequent gaping, or rather gasping. With these two exceptions, (and the first of them was not by any means excessive, and took place most frequently during the night,) every symptom was unusually mild. The pulse was perfectly regular, as to frequency, and not exceeding seventy-two beats in the minute, moderately full, but soft; the tongue was moist, and very slightly covered with a light white mucous, or slimy fur or coat; the thirst moderate; a general freedom from pain; the surface perhaps rather cool; the skin soft, and not hot and dry; very little torpor, or irritability of the

alimentary canal, or saltacious viscera; the least possible derangement in the excretions from the bladder, bowels, or skin; no derangement in the sensorial functions. Had no more chills; was cheerful, calm, and free from restlessness, unless when laboring under the above sinking spells, at which times the pulse would frequently increase, from ten to fifteen beats, but would soon resume its seventy or seventy-two pulsations. There was no irritability of temper, or peevishness, during the whole course, which sometimes accompany diseases that prove fatal: still there was something undefinable, indicating clearly, that all was not well. His disease continued near three weeks. In this case, I consider that the semi-servæ ganglion, or great sympathetic nerve, was the part on which the burden of the disease was expended. Whether it was a paresis, or semi-paralysis, or an inflammation of this system, I cannot say; but shortly (that is, from twelve to thirty-six hours) before the fatal issue, the pulse became unusually small and frequent, and the tongue dry. In this sort of cases I have always observed this rapidly increased frequency of the pulse, within a short period, or from twelve to thirty-six hours before the fatal issue: also, that these cases are usually protracted; and as certainly as they are protracted, they terminate in death. Now the question for solution is this: Can inflammation exist in this nerve, or its various branches, ganglions, or plexus, without manifesting itself for a considerable time, in the system generally? Can paresis, or semi-paralysis, exist for a length of time in mask, or latent, and its effects undeveloped on the system generally? I think they may, and do exist. For this system, or organ, appears to have an independent function, or office, to perform, and is not influenced by external agents, as other portions of the nervous system, and is perhaps independent of impressions from the external world, at least to a very considerable degree. I believe it to be the principal seat of disease, in all cases that are insidiously malignant. I will make a statement or two, and leave it with the medical profession to judge for themselves, and each individual can take hold of which ever horn of the dilemma suits him best.

When this system (the sympathetic nerve) is affected with paresis or semi-paralysis, does it induce, in its final result, coma, torpor, lethargy, or convulsions?—or, does it excite in the system, all the symptoms peculiar to extreme irritability and susceptibility? If it is affected with inflammation, does it excite torpor, coma, and convulsions; or does it excite in the system, symptoms or events, that

---

would indicate the presence of inflammation in some organ of importance to the system?

Mr. Mc. was attacked very similarly to Mr. W. He had none of the symptoms of subsidentia, or sinking, but had more or less pain in the head, which was paroxysmal and irregular, and gaped or gasped frequently: the pulse was more full and strong; he was free from dyspeptic symptoms: the pulse was natural, as to frequency; the bowels were rather inclined to torpor; the mind clear, and free from delirium. About twenty-four hours before death, he became comatose, insensible, and severely convulsed, and was not confined constantly to bed, till the last mentioned symptoms made their appearance. The duration of the disease was about three weeks.

I have pointed out but few of the symptoms in the last mentioned case; and they were generally such as did not exist in the first mentioned case. Above, the two cases are given: one was accompanied with slight and irregular paroxysms of epigastric sinking, and freedom from pain, accompanied with more or less gaping or gasping, during the whole period. The heat of the skin, and frequency of the pulse, were greatly increased, about thirty-six hours before death. The other was accompanied with pain in the head, paroxysmal, but very irregular, but no epigastric sinking—more gaping, yawning, or gasping; the pulse a little more full and strong; and died comatose, insensible, and convulsed—the latter symptoms not appearing till about twenty-four hours before death.

Which of these cases was affected with inflammation, and which with paresis or semi-paralysis of the great sympathetic nerve?—or did either, or neither of these affections exist? If not, what was the condition? I do not think that pain generally accompanies disordered states of the great sympathetic—for that must be the organ principally affected, and that produces that peculiar feeling and sinking sensation in the epigastric region; and I have no doubt, but that it is the affection of this nerve that occasions that indescribable anguish and sinking in yellow fever. I think I have discovered, that there was more pain, during the disease, when the patients died lethargic, insensible, and convulsed, than when they died in an opposite condition; and that the epigastric sinking was less. I saw the first case but three times, and that after the chills had ceased. The last case I had in attendance from the outset.

In the treatment of diseases, with apparent symptoms of malignancy, or with the regular symptoms of disease, appearing out of their



regular course, or order of appearance, the remedies most suitable and proper are, stimulants, tonics, acids, and narcotics, epispastics and rubefacients, and the least possible purging, or emesis, that will answer. To be a little more particular:—In the cases of torpor, accompanied with exhaustion, emetics of sulphate of zinc and ipecac, sulphate of copper and ipecac, or sanguinaria instead of the ipecac, Mustard is an excellent emetic in such cases: it operates speedily, excites but little nausea, and arouses the stomach—it is truly and properly an acid emetic.

Stimulants and acids should be given at the same time, in combination with the emetics. If there is much exhaustion, rubefacients and epispastics should be freely used. Very little, if any, of the preparations of papaver, is indicated in these cases. Stimulants, acids and tonics, in regular and uniform doses, at short intervals, accompanied with epispastics and rubefacients, to equalize the heat of the surface, and relieve any local symptoms, and arouse the system. In case of irritability, and exhaustion, stimulants, tonics, and narcotics, are the principal remedies. Stimulants are not required in such quantities as in cases of torpor;—neither acids nor blisters are indicated in these cases of irritability: they may be necessary to meet some local affection but if papaver is not given freely during their application; and deeming the irritation they excite, will far overbalance any good derived from their effects on the local affection. The various preparations of papaver are highly useful, and cannot be dispensed with in these irritable cases. When the patients are severely sick, tonics frequently disagree, and stimulants, and narcotics, and often narcotics alone, are indicated. This is the general treatment for cases of torpor, with exhaustion, and irritability, with exhaustion.

There is a set of cases, not so urgent nor severe, which will require such emetics as I have alluded to, and moderate purging with calomel, before entering on the administration of acids, tonics and stimulants—epispastics and rubefacients. These are cases of torpor, with moderate exhaustion. The irritable cases with moderate exhaustion, will require moderate purging with calomel, in combination with papaver, before entering on the stimulant, and tonic, and narcotic course. I believe the above general plan, will meet all the general principles of treatment. The incidental circumstances must be met according to the nature and urgency of the incident, be it of what nature it may.

In regard to the insidiously malignant cases, I much doubt whether

any course or system of treatment is followed with success; for I am unprepared to say, what effect any article of the *materia medica* will have on the great sympathetic system. It appears to be an organ neither of sensation nor motion, in the common acceptance; yet it appears to influence the actions of the heart, and the organs of nutrition and digestion—or in other words, it appears to be the great instinctive agent of the system: perhaps the organ, or instrument, through which the *vis-medicatrix naturæ* operates, or in which it is seated, as the brain is the organ or seat of intellect. But whether its actions can be changed—whether it can be increased or diminished, by the usual agents, which excite motion and sensation, and overcome diseased action and pathological states and conditions of the system, by producing a different pathological condition, or exciting a new set of actions, I feel no warrant in saying. I am rather inclined to the belief, that we cannot correct, with any of the agents known, any pathological conditions of that system. Nevertheless, it may be through this very system that all the remedial agents operate, and bring about a state of the system, incompatible with any pathological condition excited by the agents producing disease. As this system is connected throughout with the nervous system, particularly in all the organs essential to the preservation and reproduction of the human species, it may be that we should attribute all the success in the treatment of disease, to remedial agents operating on this system primarily, and changing the actions of the other organs secondarily. As far as I know, at present, I shall leave this subject forever; but not without a hope, that I may have excited some one competent to the task, to take it up, and make all clear and intelligible, that is now dark and not understood.

---

ARTICLE XLVIII.

*Injury of the Medulla Spinalis—Death: Autopsy.* By J. A. MAYES, M. D., of Sumter District, South Carolina.

Lafayette, a negro man, aged about 25, of good constitution, and in the enjoyment of excellent health, sustained a severe injury by falling from a tree on the night of the 10th of September. He had been hunting around his master's cornfields for racoons, and had discovered one in the top of a tree some 25 or 30 feet high. The usual mode of taking these animals, practised by the negroes on

Black River, is to climb the tree and shake them out, having full confidence that their trusty dogs below will not allow them to escape. This, Lafayette essayed to do, but when about 15 feet above the ground, he made some false step, which resulted in his being precipitated headlong to the ground. His companions state that he was speechless for nearly half an hour, and as soon as the power of expression returned, he complained of pain in his neck and between his shoulders. He was, however, incapable of voluntary motion, as respects the lower extremities, but could move his head a little—more freely to either side, than either backwards or forwards. He could also raise his elbows, but his hands and fingers were motionless.

I visited Lafayette about an hour and a half after the accident, and found him in the following condition:—His mental faculties in no respect disordered, memory of what had passed perfectly distinct, and gave me the foregoing account himself, differing from that received from his companions only in minuteness of detail; stating that he did not fall directly upon his head, but that the back of his neck and head struck the ground first: complains of pain in the neck, and that only when he was moved; feels no pain when suffered to be still; incapable of any voluntary motion, except the slight movements of his head and elbows before mentioned; surface of the entire body rather cool; pulse full, but slow, 54 to the minute—neither dislocations nor fractures could be detected, but some serious injury of the cervical vertebræ and spinal marrow was considered as absolutely certain, though the nature of the injury could not be correctly ascertained.

Being called upon to direct the treatment of this interesting case, I directed counter-irritants to the spine, believing that the only hope of a successful termination consisted in relieving the spinal marrow of the dangers of high inflammatory action, although it was very questionable whether its integrity was preserved. As this latter condition could not be ascertained, I could do no better than to take it for granted, that the spinal marrow had received no lesion, which would, of itself, cause death, but that loss of life might be the result if high inflammatory action should supervene. Counter-irritation, by means of blisters from the occiput to the sacrum, seemed to be preferable to any other treatment; blisters also were applied to the extremities, and not till then did I discover that he was entirely insensible to pain in the lower limbs—although the blisters drew well,



he never felt them. After reaction was somewhat established,—the pulse being 75 to the minute, full but soft,—I bled him from the arm about 10 ounces, and administered  $\bar{z}$ i. of castor oil. This was on the day after the accident occurred. The oil did not operate, however, until a second dose of like quantity was administered. The muscles concerned in the expulsion of urine seemed to have been completely paralyzed; the catheter was therefore used twice daily. The secretion of urine was very abundant, and had the appearance and smell of healthy urine until the 8th day after the injury; at which time it became tinged with blood and very foetid, the quantity also was considerably increased; this state of the urine continued till the 10th day, when it became rather thick with mucus to be drawn off by the catheter: he died a few hours after I first observed this state of the urine. His bowels were rather torpid the whole time, but could be moved by large doses of castor oil, that being the only purgative medicine administered. His breathing was very full and easy the whole time. The pulse remained at 75 until the 8th day when it rose to 90, soft, but with less volume—the 9th day it was 110, very feeble and for many hours before death it was exceedingly quick, but too indistinct to be accurately counted. He had no appetite, but seldom refused nourishment when brought to him. From the 8th day he belched a great deal of fluid from his stomach, and this belching had increased so much on the 10th day, that it was almost an incessant flow. He had hiccup occasionally on the day of his death. His intellect remained unclouded and frequently spoke of approaching death with calmness. On the night of the 20th Sept., just 10 days after the injury was received, he was relieved of his sufferings, by death; no doubt a welcome relief.

In reference to the treatment of this case, I should have but little to say, but as some may in such cases, prefer cupping to blistering the spine, it is proper that I should give my reason for preferring the latter. Cupping relieves by local abstraction of blood, and does not exert any influence upon the system generally, whereas, a blister relieves by local depletion and at the same time exercises an important stimulating influence over the whole animal economy; a matter of great moment in a case like the present. If my views on this point are incorrect, I hope some one will take the trouble to correct them; as my object in reporting this case, is not to attempt to enlighten the Profession, but simply to announce the fact that I am in want of information,—*good practical information*,—on the treatment of injuries of the Spinal Marrow.

Autopsy—7 hours after death. The autopsy in this case did not embrace a particular examination of all the organs, as the lungs, kidneys and brain exhibited no evidences of injury during life. Want of time compelled me to make the examination as short as possible. The cervical vertebræ were exposed and found to be injured in two places—The atlas and dentata were entirely separated; the atlas remaining firmly fixed in its position. The spinal marrow did not appear injured at all at this point. This fracture (as it may well be called a fracture) was complete, the separation being entire. The fifth and sixth vertebræ were also partially separated, and at this point there was manifest injury of the medulla. As soon as the muscular coverings of the bones were cut through, the marrow gushed out, similar to the escape of purulent matter from an abscess, when opened with a lancet. The medulla spinalis, at this point was evidently in a state of decomposition. How more injury had happened to the medulla at this point, where the bones were still adhering in front, than at the other, where the separation was entire, appears to me inexplicable.

The internal organs were very cursorily examined. Evidences of peritoneal inflammation were plainly to be seen, though its existence was not suspected during life. The bladder was nearly black and had formed strong adhesions to the surrounding viscera on all sides; distended with urine—The stomach was also distended with fluid.

The result of this examination was a conviction that in consequence of the injury of the medulla spinalis, no treatment would have done any good; death would have been the ultimate result. The peritoneal inflammation, no doubt, hastened its approach.

---

ARTICLE XLIX.

*Case of Adherent Placenta with Hour-glass Contraction.* Reported by Drs. MARTIN & SMITH, of Atlanta, Ga.

Obstetricians are divided in opinion relative to the adherence of the placental mass in hour-glass contractions of the uterus. Very respectable authorities\* contend that it is extremely rare, others† of equal standing, that it generally exists. We are not prepared to decide the point, but from our limited experience, are inclined to the latter opinion.

---

\* Ramsbotham, Dewees.

† Douglass.

We were called on the night of the 24th September last, to a Mrs. D., who had given birth to a fine child before we saw her, and in whom the placenta was retained. Some hours had elapsed since the labor before we reached her. External examination found the womb high up in the right hypogastrium, contracted firmly, large, and of irregular globular form. Upon careful examination per vaginam, we found it utterly impracticable to effect the removal of the after-birth without the introduction of the hand; upon introducing it, a difficulty presented itself about midway the uterus, the mouth of the womb was sufficiently dilatable to enable us to reach about half way to the fundus, but at this point the stricture in the organ prevented further progress. The careful insinuation of one finger after another enabled us at length to overcome the contraction and feel the adherent mass.

We proceeded cautiously to detach it with the index finger, until after a tedious effort we were enabled to withdraw it entire from the womb; there was happily no alarming hemorrhage. The structure of the placenta was peculiar, being in some of its adherent portions almost as hard as a schirrous gland, very much resembling a diseased mamma.

We learned from the woman, upon enquiry, that three months previously she had received a severe blow on the abdomen, from a fall, which doubtless caused the morbid adhesion of the after-birth. No formidable symptoms supervened in the case, and, with the exception of phlebitis of the left thigh and leg, she is doing well.

The operation of detaching an after-birth where the adhesion is, as it was in this case, extensive and firm, is not the work of a moment. We were engaged a considerable time in effecting it, causing with our utmost care much suffering to the patient. A ruder hand would no doubt have accomplished it sooner, but we were satisfied with the result.

We submit the case, for no novelty that marks it, but as another instance of the utility of our glorious profession—without its aid in this case, as in numberless others, death would have been the inevitable results.

Not less applicable are the words of Armstrong, relative to a kindred branch, Surgery—

“For want of timely care  
Millions have died of medicable wounds.”



## PART II.—REVIEWS AND EXTRACTS.

## ARTICLE XLX.

*A Treatise on the Practice of Medicine.* By GEO. B. WOOD, M. D., Professor of Materia Medica and Pharmacy in the University of Pennsylvania, &c., &c. Grigg, Elliot & Co. 1847.

Here is another of this so prolific class of books in American Medical Literature, exceeding all its predecessors, in size, at least, numbering 1638 pages. Being of those who have a decided objection to this kind of works—believing that the true science of Medicine can never be taught by these compendiums—that their effect on the great mass of the profession is injurious, by discouraging thorough study, making superficial practitioners; and considering how the American press has recently been flooded by works of this kind, we turned with eagerness to the preface, to see what possible apology could be offered to the profession, for the appearance of another. It there appears “that he has written in obedience to impulses, which he could not well resist”—“o’ermastered by the high behests of facts and opinions, the result of his long experience and investigation. “The present work claims to be something more than a mere compilation.” And yet, as if struck with the absurdity of the claim of originality, in a work devoted to an account of each one of the long catalogue of diseases, said claim is most materially modified by the candid declaration, that he has “gathered from every attainable source, the knowledge which he might deem important.”—Thus is it an *omnium gatherum*, like all the rest of the same class.

It is very evident that the author has, with great industry, collected, considered, and “re-arranged his materials”—that he has actually written out the whole of this voluminous book—that he has not gained the honors and emoluments of authorship, by handing another’s book to the publisher, to reprint, with here and there a note of his own; nor has he made translations of foreign works, either by his own or others’ hands, and published with his own name to the title page.—It must, we say, have cost a great amount of labor; and looking at this vast heterogeneous mass as the result, the reflection is forced upon the mind—how unfortunate that so much time and labor should have been expended, to so little profit!—so little profit and advantage to the science of Medicine, we mean—that the energy of the author should have been frittered away, amidst such a variety of subjects: what a pity, that the patience and perseverance, which lasted

through the fearful drudgery of compiling and re-arranging sixteen or seventeen hundred pages, had not been devoted to original, independent observations and reasonings upon a few subjects; for under such an application of the powers, of this professor in the oldest college in the country, with his access to the public hospitals and his large private practice, the same time would have brought forth more than one monograph, which would have carried his name, with honor, to posterity. It requires but little sagacity to foresee, that this work of labor will, in a few years, be supplanted by some other of the same kind, aided into notice by the very accidental causes, which, no doubt, will give popularity to this, when it will bear the same relation to the reigning favorite, that "Thomas' Practice, or Dewees', or Dunglison's Practice," now bears to "Wood's Practice of Medicine."

But such works will be published, as long as the profession demands them; and our abhorrence of the class shall not prevent us doing justice to the merits of this one.

The style is simple, free from any attempts at flourish—a good, sensible, didactic style—such a style, as we might anticipate would be forced upon the man, who probably did his equal share of drudging out and compiling that invaluable work the U. S. Dispensatory. The author treating of grave subjects, diseases and their remedies, very judiciously abstains from the bombast and flummery, which disfigure the pages of some of his fellow-laborers in the same field.

The work is divided into two parts—the first treating of general Pathology—the second of special Pathology and Therapeutics,—the first part, under the head of Constituent forms of disease, Etiology, Symptomatology and General Therapeutics, constitutes a very liberal treatise upon General Pathology, occupying upwards of 200 pages—an appendage valuable to many a practitioner, whose library consists of a few treatises on the Practice of Medicine. The second part, comprising the great body of the work, treats of individual diseases, which are arranged in three classes, viz., General diseases, Constitutional diseases and Local diseases. The author uses this classification, merely for convenience, very wisely, claiming for it no other merit.

The class of general diseases embraces, together with others, the Exanthematous fevers. The second class embraces but two diseases, Rheumatism and Gout. Those of the third class are thrown into six sections—Diseases of the Digestive, Absorbent, Respiratory, Circulatory, Secretory and Nervous systems.

On looking over the section of diseases of Digestive organs, we get the impression, that each one has been very carefully considered, and their varieties specified, so as to guide the young physician, as clearly as he can be guided by any book; and that the practice recommended is as free from objections as the practice of any physician would be when subjected to the criticism of the profession.

The diseases of the Respiratory system are preceded by a full developement of the various methods of physical exploration of the Chest. It is however, to be regretted that the author had not more fully developed the method of stethoscopic percussion. It is barely mentioned, in the article Auscultation, in the first part of the work, in terms calculated to show forth the diligence of the author, but certainly not to render it intelligible to, or available by the reader.

We notice, with satisfaction, full details, in the section on Urinary diseases, for testing the physical and chemical characters of the urine and the application of the results to the purpose of diagnosis and treatment.

It is impossible to comment upon each of the many diseases treated of, and we shall only offer a few general remarks, which have been suggested on the reading of it. We remark an unusually full and faithful description of the external character or symptoms of disease, and a patient pains-taking to present all their varying combinations. The practice recommended may be characterized as judicious and safe, yet not temporizing; it manifests no undue prejudice against the active agents of the *Materia Medica*, but a just caution in their use—it is entirely free from the reproach of rashness. The author's pathology of particular diseases, however, is generally vague and unsatisfactory. This general charge, we will not prefer, without specification. Of Hysteria, under the head of Nature of the disease, he says: "The nature of the complaint seems to be a morbidly excessive irritability or excitability of the whole nervous system, which causes it to be thrown into disorder, by causes insufficient materially to disturb its action in health." What a developement of the nature of Hysteria! consisting as it does of a repetition of the fact, in a purely hypothetical form, that slight causes produce the characteristic disorders of Hysteria. And in the latter clause under this head, he speaks of "the hysterical condition of the nervous system" as producing uterine and intestinal disorders.

Of the nature of Chorea, after declaring that "we know little or nothing more than that it is a functional disease of the brain," he



---

suggests this lucid exposition: "It is probably a perversion of that function of the brain, through which the will acts, rendering it partially subservient to other powers than the legitimate one."

Of Epilepsy, it is written, "The disease probably consists in a morbid excitability of the brain and each paroxysm in a morbid excitement or irritation."

Here is a sentence occurring under the head of Nature of Delirium Tremens: "There is little doubt that, could we look into the interior operations of the brain, in delirium tremens, we should see the springs of the organ every where relaxed, its machinery moving languidly and feebly; and the streams of its influence sent forth scantily to their several destinations. The vacuum thus created in all parts of the system gives rise to disturbances, not unlike those arising from repletion of the same influence; just as the wind and the storm, in the exterior world, follow as well the diminution of the sun's influence as its increase."

Now this sort of pompous emptiness may answer very well to deal out to the non-professional, to satisfy pressing importunity for information as to the nature of disease; but in a work for the profession, it is certainly out of place. We will not be so unjust as to reproach Professor Wood with ignorance of the true pathology of these obscure nervous diseases—that reproach belongs to the science of medicine; but in attempting to pass off such unintelligible jargon of words and phrases, in a magisterial manner, as illustrating their pathology, he is obnoxious to the reproach of violating the wholesome rules of a sound medical philosophy and falls short of the severe requisitions, which it makes upon those speaking from high places.

But look at his pathology of some other diseases, of which the profession claims to know something—of Rheumatism, for example: "All that we *know* of the *real* nature of the disease is that it is *peculiar*, and that it owes this peculiarity, not to the character of the cause, but to *some unexplained condition* of the system, called the rheumatic predisposition or diathesis." Surely this is a dark kind of knowledge! How much more valuable to know, that there exists disease in the spinal chord or its appendages, as a uniform concomitant, which upon fair principles, explains many of the phenomena of the disease, though not all. This knowledge points out a treatment, which mitigates the horrors of the disease and materially shortens its duration; whereas when called into the arena to contend with an *unexplained condition of the system*, in this uncertain light, our well-

meant blows may as likely hurt the patient as his enemy. We cannot, for a moment, suppose the author to be ignorant of the pathology of Rheumatism, alluded to; he has shown himself too diligent a searcher of the records of medicine, to have overlooked it. He evidently undervalues it; whilst he parades into notice, the supposition of an undefined peccant humour, and Dr. Prout's opinion that this peccant humour is the lactic acid, merely to condemn them, he appears to have neglected this pathology as too low for his criticism—he treats it with silent contempt—not a word of reference, in the treatment, to topical applications to the spinal column. Thus it ever fares with those who indulge themselves in the vain philosophy of words and occult causes; they come, at last, to prefer darkness rather than light.

Of Intermittent fever, he has no pathology, of any kind to offer. As to the nature of Remittent fever, he has no opinion; his strongest bias seems to be to that of the dependence of the disease upon “bile in the blood”—at least, there is a strong interrogational squinting in that direction. The Profession in this Southern climate, where Remittent fever is the great endemic, look with great interest, to the articles on Miasmatic fever, in these Practices; they will be grievously disappointed at finding nothing definite on its pathology, in this one. They will not be satisfied with being told that “Miasmatic fever differs from other forms of fever, in consequence of something *peculiar* in the operation of its cause,” more especially, when it is immediately added, “what this peculiarity is cannot be certainly determined, in the present state of our knowledge!”

We cannot close this article, without a remark or two upon the treatment of Remittent fever. The author takes up seriatim, each one of the measures of the old routine practice—bleeding, emetics, cathartics, diaphoretics, and the affusion of cold water; and we cheerfully acknowledge that his directions for their use, are admirable. It is then added, “In mild cases of remittent fever, few other remedies will be required besides those above detailed. When the remissions are very distinct, and approach the character of intermissions, the cure may often be greatly hastened by the use of quinia, as will be stated more fully in a subsequent page. But violent and threatening cases demand additional treatment.”

We would fail in attempting to express our astonishment at finding that the additional treatment demanded by violent and threatening cases, consists in the use of Calomel; for then follows a high enconium

on the curative powers of this medicine, and minute directions for administering it. True, he says "it is not necessary to give mercury in all cases of bilious fever,—the great majority will do well without it." But mark the conditions, upon which it is to be given. "But, when the disease is violent from the outset, and does not soon show a disposition to yield to the remedies employed, or when it assumes a dangerous aspect in its course, there will always be a propriety in administering it in reference to its constitutional effects." Thus we find, coming from one of the chairs of the University of Pennsylvania, the recommendation to treat bilious fever, by mercury pushed to salivation. Fortunately for the present generation of patients with bilious fever, in this region, this practice has been fully tried, in former times, and condemned and abandoned years ago. How much to be regretted it is, that the author did not announce, that the Profession, in the Southern country, at least, did indeed, find it unnecessary to resort to Calomel, in "the great majority" of cases, having discovered, or rather, revived and extended the use of a *specific*, which in that proportion of cases, strangled the disease in its very incipency—a treatment, which has disarmed this hitherto formidable disease of all its terrors. But of the use of this specific let the author himself speak.—"Sulphate of Quinine is another all-important remedy, in *certain cases* of bilious fever. It has before been stated, that in ordinary cases, it will often shorten the duration of the disease, if given in the remission, *after this has become very decided, so as almost to amount to an intermission*. Should no signs of cerebral or gastric inflammation be present, and the activity of the circulation have subsided or been subdued, this medicine *may be ventured upon*, whenever the remission has the character above-mentioned."

"But there are circumstances, in bilious remittent fever, which render quinia of the utmost value. When a paroxysm of great virulence has occurred, from which the patient has been saved only by the most strenuous exertions, and there is every reason to fear that a similar one will prove fatal, recourse should be had to the sulphate of quinia, in the remission, however imperfect or short it may be. When the fever has hitherto shown little or no tendency to remit, and the grade of violence is such that fatal results appear imminent, should the slightest remission show itself, and the symptoms not be those of cerebral inflammation or strong determination, the quinia should be poured in without stint. The more nearly a case approach-



es to the above extremes, the stronger is the indication for the use of the anti-periodic medicine." What then, we ask, is to become of the vast host of intermediate cases, between these two extremes? Shall we stand by and withhold the anti-periodic remedy, until they approach the extreme of malignity, and then use it in desperation? And what is to be done, for those malignant cases, which the author excepts from the benefit of this remedy, viz: those showing "the symptoms of cerebral inflammation, or strong determination?" Are such to be abandoned to their fate? Has the author yet to learn, that his excepted cases are those, which, under the treatment of Southern physicians, illustrate most strikingly, the triumphs of this heroic medicine?

In conclusion, we repeat the opinion that the history of the external characters of diseases is very full—that with indefatigable industry, the author has generally given the latest knowledge, and that this work will compare very favorably, with the best of the class.

F.

---

*On the Semeiology of the Tongue.* By SAMUEL WRIGHT, M. D., of Birmingham.—(Clinical Lectures in Medical Times.)

Whilst some are disposed, in a prodigality of prejudice, to look upon the tongue as pathognomonic of nearly all the "ills that flesh is heir to," others make comparatively light of it, and consider its testimony as little trustworthy. To be amongst the best judges on the subject, is to belong to neither of those parties. As a rule, the tongue is a very faithful indication of the condition of the alimentary organs; but its evidences are not unexceptionable. A furred tongue, for instance, is a common indication of dyspepsia, but it is not a constant one. We sometimes meet with irritable nervous subjects, whose tongues are habitually furred, yet without any signs or symptoms whatever of gastric derangement. Others again, will have clean tongues, and of natural redness, whilst they are suffering from severe stomach disorder. Various circumstances exert a remarkable influence upon this organ. Some people, otherwise healthy, get a furred clammy tongue, if their stomachs are empty a little longer than usual. Others have their tongues always furred when their stomachs are full; the coating continues only during digestion, and passes off as this function ceases. Mental and moral emotions affect the condition of the tongue in a singular manner; perhaps it never becomes morbid without the nervous function, in its higher offices, being somewhat implicated. This would explain why a furred tongue is so rarely met with in the inferior animals. It may happen, and I think not unlikely, that in dyspepsia, the disorder the brain suffers, sympathetically with the stomach, has as much share as this organ itself

in giving the tongue its characteristic coating. Certain it is, as I have said, that the feelings of the mind will, in a very few minutes, render a clean tongue a foul one. This is a subject which I have been induced curiously to inquire into for some years past, and I have seldom met with an exception to what I have just observed. Among the profoundly studious, amongst those terrified by sudden apprehensions, or shocked by the sudden advent of ill news; among the hypochondriacal, hysterical, gloomy, and desponding, you will find many examples of the mind's influence, in this particular, upon the body. A patient of mine, living near this town, will well illustrate what I say. He is a man of remarkably good constitution, and moulded like a miniature Hercules. Moreover, he has no incumbrances; an excellent mercantile business, that takes up little of his time, is partial employment for him, leaving him many leisure hours in every day that he has some difficulty in disposing of. These he chiefly occupies in fancying himself the victim of all possible kinds of ailments. There is no disease in the nosology too much for his imagination. Of course, these things are all imaginary, and tiresome enough to listen to, when your judgment and sense of justice tell you that it is not a case for "physic and a physician." You will anticipate my saying that this gentleman is possessed of a most unfortunate nervous sensibility, which chiefly manifests itself in an ideal pathology, all reflected upon his own person. The peculiarity in point, however, which I chiefly wish to speak of, refers to his tongue. I had never seen him with this organ quite clean (although I have not once attended him for dyspepsia), yet the readiness with which it acquires a fur is very remarkable. Many times have I examined his tongue, and found it comparatively what it ought to be, before hearing a recital of his imaginary maladies; and after this, in some quarter or half an hour's detail, that same tongue has put on an aspect almost like that of flannel. I am at this time attending with Mr. Carter, a patient, one amongst the pitiable many who have seen better days. I shall take occasion hereafter to give you his case in due detail, but for the present, I may observe that his tongue has the peculiarity characteristic of the one just spoken of. I should premise, however, that there is a fancied trouble in the one instance, and a matter-of-fact one in the other. Four days ago, in calling upon the gentleman I am now alluding to, one of the first things I did was to look at his tongue. I found it as usual, very pale, flabby and moist, but without any coating. After having made other necessary inquiries, I was informed by my patient that his heart, which has long been disturbed by mental emotion, the other night beat with unusual vehemence and irregularity. On my asking if he could account for it, he told me that he had just then received the distressing intelligence that an uncle, from whom he expected a competency, had not left him a shilling! This pitiable tale, told with much earnestness and visible feeling, occupied little more than twenty minutes; at the end of that time I again looked at his tongue, and found it coated with a thick white fur!

I mention these things, thus generally, to you, not only as items in pathology with which you ought to be made familiar, but also as suggestive of a discreet rule of practice, viz., to let the examination of a patient's tongue be *one of your first duties at his bedside*. My own experience, perhaps not inconsiderable on this point, enables me to say that in nine cases out of ten, and more especially among females, the tongue will be found, on first entering the room, in a very different state to what it is after half an hour's questioning and manipulation.

---

*On the Use of Opium in Inflammation.* By W. H. RANKING, M. D.,  
(Half-Yearly Abstract.)

The legitimate sphere of action of *opium*, in the treatment of inflammatory diseases, is, we conceive, a point upon which our notions have arrived at tolerable precision. Under whatever modifications of individual circumstances attending such diseases the beneficial action of opium is observed, one well-marked morbid condition has, according to my observation, existed in every case, and that is an excitement of the nervous system, altogether disproportionate to the exaggeration of vascular action. This excitement is not shown in the existence of spontaneous pain alone, as we know that that symptom may be insignificant, or altogether absent, in instances of the most extensive and destructive inflammation; neither is it shown mainly by increased sensibility to local impressions. The excitement to which I allude, exhibits itself in disorders of the sensory and motor functions of the nervous system chiefly, and consists in watchfulness, or transient delirium, irregular respiration, and especially in restlessness and jactitation. In this condition of things, whatever be the violence of the local inflammation, or whatever organ be affected, (excepting the brain in some instances,) opium is imperatively called for. In other words, whenever, during the existence of inflammation, symptoms indicative of a loss of balance between the nervous and vascular systems exhibit themselves, sedative medicines are demanded in doses proportionate to the nervous preponderance.

This want of balance declares itself, I believe, chiefly under two conditions—1st, the existence of inflammation in a constitution naturally excitable, or in which the general powers have been reduced by the disease itself, by treatment, or by contingent circumstances relating to food, air, &c.; and, 2d, in inflammation of organs or tissues, the implication of which, induces a state of things more or less approaching to that condition which, for want of a better term, we are in the habit of calling *shock*. In illustration of the first division, we may mention inflammation occurring in the hysterical constitution. In these cases, the phenomena which depend upon irritation of the nervous centres, take so decided a lead in the symptomatology of the case, that until they are controlled by opium, or some, under certain circumstances, more appropriate sedative, the inflammatory



symptoms proper do not display themselves with their characteristic features. Again, inflammation may attack an ill-fed or previously debilitated individual; or the inflammation may have been too actively combatted by blood-letting, mercury, &c., without reference to the deficient resiliency of constitution, which, in children, more particularly, may lurk behind an appearance ostensibly robust. In these cases there may exist from the first, or there comes on assuredly at no distant period, a condition in which opium becomes necessary to save life, to prevent, in fact, in the latter case, the anomaly of the patient "dying cured."

Under the second class of cases in which opium becomes a necessary part of the treatment, or is even mainly to be relied on, is inflammation of an organ or tissue largely supplied with ganglionic nerves, and in which, for this reason, the nervous system requires a large share of attention in the treatment of the case. Such is peritonitis or enteritis, either idiopathic or secondary; such are, also, one form of delirium tremens, diffuse cellular inflammation, and more particularly, phlebitis, the inner membrane of veins having the closest analogy to serous membrane in many respects, but especially in its large supply of organic nerves. In all these inflammations, the usual battery of antiphlogistics is worse than useless, unless combined with the liberal exhibition of opium.

The symptoms either existing *ab initio*, or, as is more commonly the case, coming on in the course of the disease, which indicate the necessity for opium, can only become familiar to the practitioner by clinical observation; but as far as written descriptions can be relied upon, it may be stated, that the broad expression of this condition consists in a failure in the power or regularity of the pulse, pallor of the countenance, moist skin, (but not in all cases,) tendency to incoherence, with restlessness, sleeplessness, and, in an aggravated form, jactitation. This is the broad outline, so to speak, of the state referred to, but it declares itself in minor degrees, with which experience alone can render us familiar, and the appreciation of which is in itself sufficient, in many cases, to make the difference between a successful and an unsuccessful practitioner; for to persevere in antiphlogistic treatment, or to withhold opium, when these indications offer themselves, is to destroy the patient.

In the exhibition of opium when these symptoms show themselves in inflammation, I know of no drawback,—no contra-indication which should weigh for one moment against its paramount necessity. Be the skin sweating or dry, the tongue moist or dry, the bowels constipated or not, opium must be given. The constipated bowels, which are regarded by some as inducing the necessity for hesitation in the use of the medicine, I look upon as of the least importance in the generality of inflammations; in some, as in enteritis, a quiescent state of the bowels is even needful; and were it not so, the probability is, that if the case has been properly managed at first, such a clearance will have been effected as will render any risk from accumulation comparatively small.

*Treatment of Chronic Cystitis by Injections of a Solution of Nitrate of Silver.*—(American Journal of the Med. Sciences,)

Dr. Robert L. MacDonnel, in an interesting paper in the British American Journal of Medical and Physical Science, (Sept. 1847,) extols, in strong terms, the efficacy of injections of nitrate of silver, in chronic inflammation of the bladder,—a disease which has proved very refractory to other remedies, and which entails on those who labour under it, the most exquisite suffering. In proof of the value of the remedy, he relates four cases, one of which is the following :

“A gentleman consulted me last February, under the following circumstances. He had suffered for some months from inflammation of the bladder, marked by frequent desire to pass water, accompanied by heat and scalding, violent straining, pain in the region of the bladder, above the pubis and in the perineum, and a constant feeling of heat and weight in the lower portion of the abdomen. These symptoms gradually increased in severity. The urine became at first bloody, and afterwards purulent, and the desire to void it became so urgent, that it had to be yielded to at least every fifteen minutes; the discharge of the fluid being followed by pain and scalding at the neck of the bladder, and along the course of the urethra. His general health became impaired: and his sleep being so frequently disturbed, a haggard and anxious expression of countenance, and extreme irritability of the system, were soon established.

“When he first consulted me, fully one-half of the fluid passed from the bladder was pure pus; and after repose, a deposit of blood-globules was found to intervene between this and the supernatant urine—the latter being highly alkaline, foetid, and albuminous. Examined microscopically, it exhibited some scales of nucleated epithelium, a large deposit of triple phosphate in prismatic crystals, pus, and blood-globules. There was no pain in the loins or along the ureters. He had a stricture of long standing, about one inch from the orifice of the urethra. In addition to the above characters, the urine was frequently mixed with tenacious masses of lymph, varying in length from half an inch to an inch,\* and entangling a quantity of earthy matter; they frequently obstructed the passage of the urine through the stricture, and required to be broken up and squeezed through by the pressure of the patient's fingers.

“Having dilated the stricture, so as to allow a large-sized catheter (No. 11, Weiss) to pass, I determined to treat the disease by injections of nitrate of silver; and accordingly, on the 17th of February I injected into the bladder, a lotion composed of eight grains of lunar caustic, two drachms of tincture of hyoscyamus, and four ounces of distilled water.

---

\* C'est encore dans les cas de suppuration, qu'on trouve des productions pseudo-membraneuses dont parlent les auteurs. C'est l'expulsion de ces fausses membranes par l'urèthre qui a fait répéter à tant de médecins que la tunique muqueuse de la vessie pouvait être entièrement détachée et expulsée par portions avec les urines.—FERRUS, Dict. de Méd., Art. *Cystite*.

"The injection caused hardly any inconvenience, except that of inducing a strong desire to empty the bladder, which was prevented by compressing the penis, until the fluid had been in the bladder for about one minute, when it was allowed to escape. The next day, the patient stated that he was somewhat better, but the quantity of pus and blood was not, however, much diminished, and the flakes of lymph were more numerous and larger than before. Although he continued improving, yet, as the amendment was not as rapid as I anticipated, injection of the viscus was again resorted to on the 5th of March. On this occasion, the quantity of caustic was increased to sixteen grains in the four ounces of distilled water, and the hyoscyamus was omitted. A decided improvement immediately followed; the frequency of making water was greatly diminished; instead of requiring to be voided every fifteen minutes, the bladder could retain its contents for more than two hours at a time, and the quantity of pus had greatly decreased. An injection, of the same strength, was again employed on the 28th of March, and with happy results. The urine could now be retained for three or four hours; was passed without pain or scalding; was clear and transparent, and, to the naked eye, free from pus; but, when examined microscopically, a deposit of pus-globules and some epithelial scales were perceptible. On the 18th of April, I repeated the injection, and since then he has been completely free from any symptoms of his troublesome disease; he has resumed his former mode of life and pursuits, and has been subject to various changes of temperature whilst travelling, without experiencing the least return of his former symptoms."

The method of injecting the bladder which Dr. MacDonnell has found most efficient is the following:—

"The patient being placed either in the erect position or on a sofa, a gum elastic catheter, about the size of No. 9 or 10 (Weiss), is introduced, and water at the temperature of 98° Fahr., is injected through this into the bladder, by means of a caoutchouc bag, or, what I prefer, a syringe, with a "three-way valve," by which the fluid can be drawn back from the cavity if necessary. After the bladder has been completely cleansed of any fœtid urine and mucus which may be contained in it, the solution of the caustic, being heated to the same degree, is to be introduced in a similar manner, and allowed to remain there for about one minute, care being taken, by compressing the urethra, to prevent its being forcibly ejected by the violent straining that is certain to be induced. The quantity of water or solution should never exceed four ounces, for though the bladder in its healthy state is capable of containing nearly a pint and a half of urine, without being over-distended, yet as the quantity it is capable of retaining in severe chronic inflammation, seldom exceeds a few tablespoonfuls, the bladder accommodates itself to its diminished contents, and gradually becomes smaller, and consequently, a large injection would act injuriously in two ways—by over-distending the organ, or by passing up into the ureters. In fact, we find it unnecessary to use



a larger quantity of the solution than I have mentioned, for it requires some address to introduce even that amount without resorting to force. The patient is then ordered a warm bath, and should the urine become bloody or mixed with shreddy concretions, he should use frequent fomentations and anodynes. But these symptoms seldom last for more than a few hours, and our patient should always be informed that such consequences are likely to be the immediate effects of the operation.

"My patients have not suffered from retention of urine, which it appears frequently follows the use of the solid nitrate in the practice of Lallemand, nor have they had any inconvenience which was not readily allayed by an opiate.

"The advantages which I consider the solution of nitrate of silver possesses over that substance in a solid form are, first, that we can employ it of various strengths, from one to four grains, or even stronger if necessary. Secondly, we are certain that the application comes in contact with the entire diseased surface. Thirdly, we are also satisfied that it does not act more violently on one part than on another. Fourthly, it is more readily employed by an inexperienced operator; and, above all, it cannot possibly be attended with any risk, from the apprehension of which it is not easy to divest the mind, when using the *porte caustique* of Lallemand, and together with the above advantages, it has this also to recommend it, that it will be found at least equally successful."

**A Case of Vesico-Vaginal Fistula remedied by Caustic.** By ELAN W. HARRIS, M. D., of Elm Wood, Cape Girardeau county, Mo. (Western Journ. of Medicine and Surgery.)

Mrs. C., a married lady, aged 30 years, presented herself to me early in February last, laboring under the unfortunate, painful, and disgusting infirmity of vesico-vaginal fistula. Her garments were constantly wet; the vaginal cavity, labia and thighs bathed with urine, in an erysipelatous condition, and exquisitely tender. The complaint had existed for five years, and occurred seven or eight days after a tedious first labor, and violently severe manipulations of her midwife. In addition to the soreness caused by the irritation of the urine, she suffered violent pain in the bladder, which often prevented sleep whole nights; she sometimes passed urine the natural way for a day or two at a time, but always with great pain, and if, during her monthly periods, the urine is discharged through the urethra it is mixed with the catamenia fluid, just as it is when the urine passes through the fistula and vagina.

The parts being too sore to attempt any exploration, recumbency, aperients, fomentation, and tepid lotions were enjoined. In a few days, her condition being much improved, the finger was introduced into the vagina, the walls of which felt hard and irregular, presenting to the finger the sensation of cicatrices. No os tincæ or neck of

the womb could be felt. The vaginal speculum was now carefully inserted into the vagina, which terminated in a round sac-like cavity without anything like the neck of a wound projecting into it. Instead of an *os tincae*, a small opening was found large enough to admit a silver probe which entered the uterus; about three quarters of an inch from this aperture, in the anterior wall of the vagina, was found an oblique fistulous opening into the bladder (five lines in extent), through which the urine could be seen flowing. The bladder was then sounded, and I soon convinced myself of the existence of a calculus. The patient was informed that the only relief that could be afforded was by extracting the stone, and that there was barely a hope that the fistula might be healed, and thereby relief obtained from the troublesome and disgusting incontinence. She replied that she would willingly submit to *any* operation rather than remain in her miserable condition.

On the second day after the examination, a long delicate pair of forceps was introduced through the meatus urinarius, with a bistoury at hand to make the proper incision if found to be necessary for the extraction of the stone. By gently and gradually opening the chaps of the forceps, the urethra was sufficiently dilated in about twelve minutes, (with very little pain), to enable me to take hold of the stone. In endeavoring to get a firm grasp, this was crushed to pieces, which I considered a fortunate occurrence; the fragments were removed with the forceps and syringe, at a sitting of a few minutes each day for five days, when no more could be found. Some of the particles passed through the fistula and were washed out of the vagina with a syringe. I weighed four drachms and six grains of gravel saved, and there was fully as much lost. No unpleasant symptom occurred, and she was permitted to walk about, expressing great gratification on account of freedom from pain.

The incontinence was still annoying, and on the sixth day after the removal of the last of the gravel, the speculum was again introduced, and a piece of solid lunar caustic made fast by a thread in the same forceps used for extracting the stone, was carried up through the speculum, into the vesico-vaginal opening, and rubbed on the edges and angle of the wound, until they were completely cauterized. A tube was firmly fixed in the bladder to conduct the urine into a vessel placed below, and emollient injections daily used. On the third day there was tenderness and pain in the pelvic region, fever and bilious vomiting. The catheter was removed, and by the use of the lancet, an emetic, and fomentations, those symptoms were relieved. The catheter was then replaced and not removed until the eighth day, when to my great satisfaction it was found that she could retain the urine and pass it per vias naturales.

Thus has a cure been obtained of a loathsome malady, which at a time still not very remote was supposed to be beyond the resources of art.

I saw Mrs C., yesterday, and she informed me that she had men-

struated three times since the operation without difficulty or pain, but that the menstrual fluid passes from the bladder mingled with the urine, showing, I think, the existence of utero-vesical fistula. Fears are entertained that particles of the menstrual fluid retained in the bladder may form the nucleus of another stone. The woman, however, is contented and happy.

*Purulent Infection.*—(Med. Chirurg. Review.)

M. Sedillot believes that authors have too generally regarded this affection as constantly fatal in consequence of their only taking into consideration extreme cases. He establishes a distinction between *purulent infection* and *metastatic abscesses*. As long as the disease is confined to the former condition, it may be cured; if there are abscesses only of small size, or few in number, all hope is not extinct; death only being inevitable when these are very numerous or large, or open into the pleura, the articulations, &c. The effects vary much, also, not only according to the quantity of pus mingled with the blood, but also according to its qualities—the pus from a phlegmon producing much less deleterious effect than a sanious pus. Wounds of the perineum, in which there is a mixture of pus and urine, produce, even when the suppuration is not very abundant, fatal effects in a very brief space of time. It may be replied to the statement that the less advanced cases of purulent affection recover, that such were not examples of the disease at all; but M. Sedillot believes the pathological changes induced in man and animals from this cause are the same, and numerous experiments upon these last have proved to him—1. That a small quantity of pus injected into the veins only produces slight effects. 2. If the injection be repeated for several successive days, thirst, shivering, &c., are produced; but the animal continues to live if they are then discontinued—so that we must kill it in order to observe the pathological alterations at this period, such as patches in the lungs, emphysema, &c. 3. If a new portion of pus be daily injected, death takes place, always producing the same changes.

The lungs are the organs in which pus is found to be most frequently deposited in this affection; then follow the pleuræ, the joints, the liver, and the muscles. Although veins are constantly found leading from the source of pus, in a great number of cases no trace of *phlebitis* is visible. After amputations, in deep-seated phlegmons, in chronic suppuration, caries, &c., it is always by means of the divided or eroded veins that a direct communication between the purulent centre and the circulation is established, and the mixture of pus with blood which this gives rise to is one of the best ascertained phenomena of the disease. The constant obliteration of the veins by coagula, even in the cases in which they are inflamed, is contrary to the statement of most authors, an exceptional occurrence. The coagulum, when it exists, does not adhere to the walls of the vein, but



floats in the pus, having an elongated, fusiform shape. If it is interrupted from place to place, the blood remains fluid in the intervals, having lost its red colour, and become converted into a sanies by admixture with pus.

Recognizing different stages of this affection, and its curability in some of these, M. Sedillot enumerates the following indications of treatment:—1. Combating the inflammatory symptoms, if intense, by bleeding, especially local. 2. Modifying the surface secreting the pus, in the case of a wound. This is to be done by stimulant lotions or baths, or injections of aromatic wine. In this way the vitality of the tissues becomes modified, and the pus changed in qualities, or its secretion arrested. 3. Furnishing ample exit for pus by prompt incisions if necessary. 4. The frequent renewal of dressings. 5. The use of the actual cautery. This is often very efficacious. 6. If purulent infection seems threatened after attempting union by the first intention, the commencing cicatrix is to be broken, and the edges of the solution of continuity irritated. 7. A revulsive action of the secretory organs is to be maintained, especially by the use of purgatives. 8. Cold fluids should be drank in abundance, to maintain the venous system in a state of repletion, and diminish its absorbing powers as much as possible. 9. Counter-irritants should be applied in the vicinity of any organs suffering from derangement of function. 10. Tonics are not indicated until the febrile action has declined, and true prostration set in. 11. In the case of symptoms of infection occurring in a carious limb, amputation offers the best resource if its performance be not too long delayed.

---

*Cold Water in cases of Severe Burns.*. By Dr. KÜSTEN.—(London Med. Gaz., from Caspar's Wöchenschrift—and Am. Journ.)

A case of very extensive burning, treated most successfully by the prolonged application of cold water, has been recorded by Dr. Küsten, the particulars of which seem to indicate the great advantage which may probably be derived from this mode of treatment in most cases of severe burns. Dr. Küsten was first led to set a high value on the use of cold water in such cases, by observing the good effects which resulted from it, in the case of his own child, nine months old, which was severely scalded about the neck, chest, and abdomen, by the upsetting of a tea-kettle containing boiling water. The application of cold water was commenced immediately after the child's dress was removed: very abundant vesicative power had already taken place in the form of numerous large and small blisters. For six hours, without intermission, the application of cold wet cloths was continued: the cloths being replaced by others as quickly as they became warm. At the end of this time, the smaller vesicles had quite disappeared, and the places occupied by the larger ones were indicated by more or less intensely reddened spots. The child meanwhile had fallen asleep, and it slept soundly the whole night,

(the accident having occurred about six o'clock in the evening). On the following morning the only trace of the burn consisted of a dry shrivelled appearance of the cuticle on one small spot; and this peeled off in a day or two.

The case, however, in which the beneficial effects of this mode of treatment were especially illustrated, occurred in a brandy distiller, who, in consequence of the bursting of a still, was extensively scalded over the body by the boiling and blazing spirit. The man's head, at the time of the accident, was fortunately covered by a thick cloth cap, and escaped injury; but the upper part of the body, being defended only by a shirt, suffered severely. When seen by Dr. Küsten, about an hour after the accident, the patient was almost unconscious: he lay moaning, and constantly ejaculating "Fire?" After washing off, by means of a watering-pot, the layers of scraped potatoes which had been spread over the burned surface, it was found that over the whole body, down to the lower part of the thighs, there was scarcely a spot which was not more or less injured. The slightest degree of injury was manifested by vesication; but over the neck, chest, arms, and abdomen, the skin in places was quite destroyed. Dr. Küsten immediately covered the entire burnt surface with linen; and for an hour this was kept constantly cold and wet, by pouring cold water over it from a watering-pot. After pausing for five or six minutes, the application of cold water was renewed, and continued for another hour, at the end of which time the man had recovered from his state of partial unconsciousness. He was then left, with directions that the application of the cold water should be continued as before. When seen about six hours afterwards, the patient was in a promising condition: his face was slightly flushed; eyes open; pulse 100. He complains of a sense of general burning, which was relieved by drinking, and by the repeated application of cold water to the burnt surface. This application was continued until the patient complained of being cold. On examining the injured part the following day, the places which were previously occupied by the vesications, were indicated only by intense redness; the other part had much the same appearance as before: portions of the destroyed skin came off on removing the dressing. The injured parts were then dressed with cloths dipped in vinegar, and kept constantly wet by sprinkling cold water on them. The patient had some sleep during the night, and on the following day the reddened portions of skin had resumed almost their natural colour: commencing granulations were observed along the margins, and within the spaces of the surfaces, where the skin had been destroyed. The pulse was 90, the thirst less intense, and the tongue less dry than on the preceding day. For nine more days the same treatment was continued, and with the happiest results, for at the end of this time the wounds were almost healed.

In the treatment of such severe wounds by this mode, the dressing must, of course, be changed at least once in the twenty-four hours.

Dr. Küsten mentions one or two other instances, in which the

healing of burns, of various degrees of severity, was effected most rapidly and satisfactorily by this continued application of cold water.

*Case of Inflammation of the Spleen, terminating in Suppuration.*

By J. DANIEL HOLLY, M. D., of Lowndesborough, Ala. (New York Journ. of Medicine.)

April 10, 1847. I was requested by Mr. C. to visit his son, aged 15 years, who had, previous to this attack, labored under intermittent fever. I found him laboring under excruciating pain in the left hypochondrium, extending as far as the clavicle or shoulder, increased on pressure, with sensation of cold, and partial rigor, considerable nausea, dry cough, more than ordinary symptoms of pyrexia, great weight and fulness in the left hypochondrium, involving the upper portion of the lumbar space, with pain on respiration, slight hæmatemesis, with accelerated pulse, tumor extending from the origin of the cartilages of the ribs on the left side to the mesial line in one direction, descending to the ileum, (crest), occupying the upper portion of the lumbar space.

*Treatment.*—I had recourse to venesection, both local and general, cups applied to the left hypochondrium and lumbar space, with partial abatement of the foregoing symptoms. As the indication, at this juncture, for applying a blister was decided, vesication was resorted to, over the whole space occupied by the tumor, followed by the ordinary purgatives. The blister drew well, and the purgative had the desired effect, the pain and fever being diminished. On the following day I exhibited the following mixture of Twining: \* R. Pulv. Jalap, Rhei, Columbæ, Zingerberis, Bitart. potassæ. aa ðiss., Ferri sulphas, grs. x., Sennæ tincturæ, 3 ij., Aquæ menthæ sativæ, 3 v.

Alternating with this mixture, after an interval of five days, I prescribed for him pills of Sulphas ferri, x., Aloes soctari, ðiss., Sulphas quinaæ.

April 22, the above were discontinued; the patient now complains of a dull heavy pain, with a peculiar burning sensation in the region of the spleen; striking as far as the spine and clavicle; attended with a fulness and throbbing, and an increase of the tumor.† Shivering came on at intervals, terminating in slight perspiration over the most œdematous portion. I applied warm fomentations of hops, contained in a small woolen bag, wrung out in warm water, followed with a poultice of linseed meal, copiously sprinkled over with mustard, without any perceivable change in the character of the enlargement. The patient is much debilitated, the pulse is frequent, unequal, small, and sharp, with flushing of the face; the skin cold and clammy, with

\* Stokes' Lectures, American edition, vol. I., p. 562.

† "In unyielding textures," says Mr. Liston, (Elements of Surgery, American edition,) "the increase of swelling by the formation of purulent matter, is often attended by an aggravation of the symptoms, and with an increase of danger to the structure affected."



perspiration towards evening; the ammoniacal plaster was then applied without any apparent benefit, towards the evacuation of the pus externally. Caustic, (the *potassa fusa*,) was then had recourse to. I used it in the solid form well pointed, not in paste, as is sometimes used. This application had the most happy and desired effect. On the following day the purulent fluid found an outlet externally, (immediately over the splenic region,) and large quantities of a dark puriform discharge came away through the opening; it was then dressed with common meal poultice. The patient at this time is much emaciated, from large quantities of pus being added to the circulation, producing hectic fever, accompanied with diarrhœa. He was put under the use of nourishing food, wine, tonics, etc., which were used sparingly for a short time, and afterwards gradually increased. The diarrhœa was stopped with opium, astringents, and absorbents. For the inordinate perspiration I used the *Acidum sulphuricum aromaticum*, with the happiest effect. A tent was then introduced through the opening in the abdominal wall, in order to keep up the discharge from the spleen.

April 29. Discharge has stopped; patient takes exercise in open air; appetite good; food exhibited sparingly; the left hypochondrium is much excavated as it were, from the large quantities of pus evacuated from the spleen.

---

*On the Local Treatment of Amenorrhœa.* By A. LEGRAND.  
(Month. Journ. Med. Sci., from Gaz. Méd. de Paris.)

The author commences this short memoir with a deserved compliment to the practitioner, whoever he was, who first thought of the application of nitrate of silver in the treatment of affections of the mucous membranes, characterized by a diminution of their vitality, a relaxation of their texture, an increase and vitiation of their secretion; for, he says this idea has been the happy foundation of many safe uses and unexpected benefits of this remedy. He refers in particular to its unexampled success in virulent ophthalmia, whether sporadic or epidemic, and in urethral discharges, and remarking on the varieties in the strength of the applications employed by different authorities, he condemns the excessive quantities recommended by some, as a practice eminently disturbative. Noticing the easy transition from the use of nitrate of silver in the urethra to the use of it in the vagina, he remarks on the anatomical causes of the less efficacy of the form of solution in the latter case, as having led first to the direct cauterization of the canal, either general or partial, by the aid of the speculum, with the nitrate in the solid state; secondly, to the use of rolls of lint, bougies, and the like, smeared with an ointment of nitrate of silver.

To the use of the nitrate in the solid state he objects, on the ground of its severity and other inconveniences, and rejecting the supposed advantage of the tampon for keeping apart the inflamed opposite

surfaces of the canal, he objects to it, besides, as a foreign body, the presence of which must irritate. Our author's method in opposition to these, is the simple application of an ointment of the nitrate, which may penetrate between the rugæ of the canal. This ointment is composed of one part of nitrate of silver, dissolved in twenty-five parts of water, and then thoroughly mixed with seventy-five parts of cerate. From two to three grammes (from thirty to forty-five grains) of this cerate are put into a muslin-bag, open enough in texture to permit the cerate to pass through under a slight pressure. The fore-finger is inserted into this bag up to the first phalanx, the bag being fastened around it, and the finger so armed is introduced into the vagina, and is carried over its whole extent, so that every sinuosity of the canal and of the vulva may be freely anointed with the contents of the bag. Our author occasionally employs the ointment of somewhat greater strength. He finds it of the greatest service in various affections of the vagina of an inflammatory character, accompanied with discharges, care being first taken to remove as far as possible those determinate causes with which the affection may be connected. Other remedies may be applied to the vagina by the same method—thus, Dr. Legrand has used successfully by this method an ointment containing tannin in relaxation of the vagina.

---

*Influence of Quinine on the Volume of the Spleen in Ague.*  
(Lancet.)

M. Valleix, physician of the Hôtel Dieu, has directed his attention to the action of the sulphate of quinine on the volume of the spleen in intermittent fever. He has done so to test the accuracy of a statement made by M. Piorry, that the disappearance of the paroxysm coincides with the diminution of the volume of the spleen; that this organ sensibly diminishes in thirty or forty seconds after the administration of a full dose of quinine, in solution, and acidulated; that the diminution goes on very rapidly if the quinine be continued in a sufficiently large dose. M. Gouraud having examined into this matter, however, states that he has not found the spleen thus diminish, but that, in consequence of an accumulation of gas in the stomach, from the ingestion of the quinine, the left hypochondrium is rendered sonorous, and the dulness over the spleen becomes masked. These opposite statements M. Valleix has kept in view in making some fresh observations. He narrates a case, and its course; quite a simple case of ague, occurring in a young and robust man, who had never suffered before. It was a recent case, and there were no evidences of organic disease in any organ; the spleen had undergone very considerable enlargement, being readily perceived through the abdominal wall, and therefore its size could be estimated with the greatest precision. The sulphate of quinine, although given in a very strong dose of thirty grains, and acidulated, so as to render the salt a bisulphate, did not act, as represented by M. Piorry, on the vol-

ume of the spleen, neither at the end of forty seconds, nor of twenty minutes, nor even of twenty-four hours. The medicine also had no such power when given in still greater quantity, but divided, during the day, into several doses, and continued on succeeding days. But after the application of cupping-glasses and leeches over the splenic region, the volume of the spleen, on the contrary, diminished rapidly, although the dose of quinine was abated. Lastly, notwithstanding the persistence of the splenic engorgement, the fever was cut short, and there was no trace of a recurrent paroxysm.

Another equally uncomplicated case occurred to M. Valleix, and the same method being tried, was attended by the same results. It must, however, be mentioned, that three days after the first dose of quinine, a slight diminution of the spleen was noticeable; but this little decrease, which perhaps, too, was partly owing to a bottle of eau de Vichy which the patient took, was lost sight of when compared with the rapid diminution which followed two days afterwards, when cupping-glasses were applied over the spleen, and which continued to go on. In this case, also, as in the preceding, although the enlarged spleen remained, the fever was removed.

The third case differed from the two preceding, in that it was of older date; but there was no essential difference in the effects of the treatment. The spleen remained unaffected in size during the first day, when quinine alone was given; but quickly decreased after local bleeding, although the dose of quinine was lessened. The fever was removed before the engorgement of the spleen had subsided.

Thus these observations contradict the assertions of M. Piorry, both as to the coincidence of the disappearance of the fever and the decrease of the spleen, and as to the immediate and prolonged influence of quinine in diminishing the splenic congestion. M. Valleix also confirms the observation of M. Gouraud as to the formation of gas in the stomach upon the quinine being swallowed, augmenting the resonance over the left hypochondrium, and so hiding the dulness over the solid spleen beneath to a slight extent; not so much so, however, but that palpation and percussion will readily detect the engorged organ.

---

*On the Use of Starch Bandages.* By Dr. ROGNETTA.—(*Annales de Thérapeutique Méd et Chirurg., and Amer. Journ.*)

The starched apparatus has now been employed for a sufficient length of time, at the clinic of La Charité, in the treatment of fractures, to enable us to form a definite and mature opinion of its value. We are the more willing to weigh its value, because on this point there is much diversity of opinion among the surgeons of Paris, and because we have before us many facts capable of affording us the grounds of a decisive judgment on this subject. First, it is to be remarked, that in the Parisian Hospitals the starched apparatus has been adopted into general use by two surgeons only, namely, Vel-



peau and Blandin. But yet this apparatus has been everywhere tried. At first it was applied indiscriminately to fractures of the extremities, of all kinds. Velpeau himself, in his first memoir, extolled it, without any exception. In the sequel, nevertheless, unsatisfactory results were noticed in oblique fractures of the shaft of the femur, and Blandin was the first to give up this method in fractures of that kind; and Velpeau finally did the same. At the Hotel Dieu we have seen in fact such fractures treated by this apparatus, present, some an enormous riding of the fractured extremities of the bone, others an entire failure of reunion, owing to the starched bandage forming, as it dried, an arch projecting from the limb, while, as soon as the limb itself lost its former swelling, there was no longer a co-aptation by the apparatus; the muscles contracted without impediment, and dragged the disunited parts so as to ride more and more on each other. Velpeau has doubtless been led, by cases like those described, to abandon his first opinion; and his doing so is creditable to his love of truth. Indeed, the cases which we have seen so treated at La Charité, though cured, were not remarkable for freedom from deformity. Thus such fractures must be left to the old treatment of Scultetus, with the addition of continued extension, for which purpose a starched bandage suffices. Though objectionable at the commencement, yet we must add that, towards the end of the treatment of oblique fractures of the thigh, when the patient begins to walk about on crutches, the starch apparatus answers admirably. What we have said, applies also to fractures of the body of the humerus. But as regards fractures of the neck, and of the condyles of the humerus, as well as of the condyles of the femur, the starched apparatus, if applied after the swelling has gone down, is of the greatest utility. Velpeau and Blandin apply the starched apparatus to all other fractures, namely, to fractures of the leg, of the forearm, and of the clavicle. For the forearm this apparatus possesses very great and obvious advantages. But we confess we cannot see its superiority over the common apparatus in fractures of the leg. The state of the limb cannot be ascertained till it is too late to remedy the riding of the bones, if that shall have taken place. Thus the starched bandage, though it may be regarded as an important acquisition to surgery, owing to the many applications of which it is susceptible, in various departments of practice, is far from having displaced the treatment handed down to us by Scultetus. It is proper to add, that Velpeau uses but a weak solution of starch, so that his bandages are not very stiff. The starch is first worked up with spirit, and then water is added, to bring it to the consistence of syrup. The bandages, after being dipped in the solution, are squeezed as much as possible, and the whole dries in a few hours if the limb be placed on a pillow covered with a large sheet of paper.

## BIBLIOGRAPHICAL NOTICES.

1. *Principles of Human Physiology, with their chief applications to Pathology, Hygiene and Forensic Medicine.* By WM. B. CARPENTER, M. D., F. R. S., &c., &c., 3d American, from the last London Edition—with Notes and additions by M. CLYMER, M. D., &c., &c., with 317 wood-cuts and other illustrations. Philadelphia: Lea & Blanchard, 1847. 8vo., pp. 752.

We take pleasure in calling the attention of the Profession to a new edition of the above valuable work. The productions of the able author are now too well known to require any eulogy at our hands. They justly hold the first rank in Physiology, and should be read by all who wish to keep pace with the rapid advances of the study of animal organism, and of the Human in particular. The enterprising publishers deserve much credit for the very handsome manner in which they have gotten up the book.

2. *Outlines of the Veins and Lymphatics; with short descriptions. Designed for the use of Medical Students.* By JOHN NEILL, M. D., &c., &c. Philadelphia: E. Barrington and G. D. Haswell. 1847.

In the language of the author's preface, "this little volume is intended to accompany two of a similar kind, which have already been published, on the Arteries and Nerves." The work is concise and well adapted to the use of Medical Students in the beginning of their studies.

3. *Lectures on Subjects Connected with Clinical Medicine.* By P. M. LATHAM, M. D., F. R. S., Physician to St. Bartholomew's Hospital, 2d Edition. Philadelphia: Barrington & Haswell. 1847, pp. 158.

Under the above modest title, Dr. Latham has presented the Profession a very useful little work upon Semiology, or the Doctrine of Symptoms, embracing all that is important to the general practitioner in relation to Auscultation. Such works cannot be too much multiplied in our country, where diagnosis is so generally neglected, especially in diseases of the chest. Its passage to a second edition evinces its appreciation. It should be in the hands of all Students of Medicine.

4. *Lectures on the Principles and Practice of Physic:* Delivered at King's College, London, by THOMAS WATSON, M. D., &c., &c. Third American from the last London edition. Revised with Additions by D. FRANCIS CONDIE, M. D., &c., &c. Philadelphia: Lea & Blanchard, 1847. pp. 1040.

We have received from the publishers, this very elegant, voluminous

ous and useful volume. It will be perceived that this is a new edition of a practice of medicine, which has been before the profession since 1843—one too, which has been so well received as to require several editions to supply the numerous demands for it. This work merits the liberal patronage which it receives in our country.

5. *Illustrations of Medical Botany*: consisting of coloured figures of the Plants affording the important articles to the *Materia Medica*. And descriptive Letter Press by JOSEPH CARSON, M. D., Prof. of *Materia Medica* in the Philadelphia College of Pharmacy, &c., &c. Philadelphia: Robert P. Smith, 1847.

We have been furnished a specimen No. of this magnificent work in folio. It contains three splendid engravings of plants, on stone, and the printing of the letter press is of superior style. We take pleasure in calling the attention of the profession to this publication, and soliciting for it a liberal encouragement to the author, well known as he is for his contributions to the *Materia Medica*.

---

### PART III.—MONTHLY PERISCOPE.

*Treatment of Typhoid or entero-mysenteric Fever, by Ethiops mineral or the black sulphuret of mercury.* By Prof. SERRES.—(Translated from Archives Générales de Méd.)—The Professor commences by remarking that all exanthematic fevers, as the typhoid fever, are composed of two distinct elements: 1st, the exanthema which constitutes the foundation; and 2d, the group of phenomena which the presence of this exanthema develops in the organism called *fever*, and which constitutes the form of these diseases. If the exanthema is discreet or of little intensity, the fever is light; if, on the contrary, it is confluent, the fever is very intense. M. Serres establishing thus the analogy between variola and typhoid fever, has thought that as the former was aborted in the eruption of its pustules by mercurial preparations, (as covering the face with the plaster of *Vigo cum mercurio*,) so the latter might yield to the same potent agency. His treatment consists in the internal and external administration of mercury. His formula is, internally, Black-sulphuret of Mercury (*Ethiops mineral*), 1 gramme; powdered gum Tragacant, 50 centigrammes; simple Syrup q. s. for four pills—Dose 4 or 6 pills every second day. Also, externally, mercurial ointment, in frictions, over the abdomen, 8 or 10 grammes repeated every morning. This treatment may be continued eight or ten days before salivation is developed, when the frictions must be discontinued and the dose internally diminished one half. M. S. says in two or three days the action of this treatment is quite evident; the fever diminishes, the typhoid symptoms disappear, and the patients soon convalesce. He seldom uses more than 2 to 3 grammes of the *Ethiops mineral*.



*Neuralgia—Tic Doloureux.*—The following case, which occurred in the practice of R. H. Alkanett, M. D., &c., is important and interesting, inasmuch as it throws light upon at least one occasional cause of an acutely painful and obstinate affection, so frequently perplexing to the routine practitioner, who relies for its removal on the reckless administration of inordinate doses of the most powerful and highly deleterious narcotics. "A gentleman called on me a fortnight ago, suffering from a severe tic of the trifacial nerve, which branches up on the cheek and forehead, and the paroxysms observed like an irregular periodicity. His appetite was good, and the functions of the stomach were apparently uninjured; the liver secreted a due quantity of bile; the bowels acted with regularity; and nothing could be detected, after the most minute search, to account for the agonizing pain in the peripheral expansions of the sentient nerve. As is my custom, I placed him under a preliminary course of active purgatives, and the pain in the face, and indeed all the symptoms, were aggravated to a considerable extent. Disregarding this temporary manifestation, I urged upon him the necessity of continuing the aperients until the full effect should be produced: and this morning he informed me that, in the middle of the night, he had a most copious evacuation; undetected scybalæ, in large quantities, had been ejected from the bowels: he immediately experienced an inexpressible feeling of relief, and the facial tic has totally disappeared.—[*Lancet*.

*Pyro-acetic spirit in Gout and Rheumatism.* By Dr. JOHN HASTINGS.—"For upwards of twelve months," says Dr. Hastings, "I have employed Pyro-Acetic Spirit in the treatment of gout, acute and chronic rheumatism, and my treatment has been attended with a success quite extraordinary, far exceeding the results usually obtained by colchicum, &c. I have not yet seen a case of gout, or acute rheumatism, which has not rapidly disappeared under its use, at the same time that it brings about a very improved condition of the general health. Chronic rheumatism requires a more lengthened treatment for its removal; indeed, it has less power over this affection than the two preceding."—[*Ibid*.

*Operation for Cataract under the Influence of Mercury*—M. Travignot addressed a note to the Academy, stating that he looked upon mercurial salivation as a means of preventing many of the evils of inflammation after the operation for cataract. He seems to have imbibed this notion from the general observation of the influence of mercury in acute inflammation of the iris and cornea, and from considering that such a condition of those parts of the eye is what is to be feared after operating. He has put this idea to the test, having operated on three patients, who were just beginning to be affected by mercury, and in whom, too, there were some complications. He effected a perfect cure in from three to five weeks, having had no ills resulting from inflammation. The mercury is continued two or

three days after operating, combined with extract of opium, so that the salivation induced may be most severe, just at the time when the ordinary precursors of iritis, or of corneitis, make their appearance—that is, about the third or sixth day after the operation.—[*Ibid.*]

---

*Cæsarian Section.*—The statistics of the Cæsarean operation at present yield the following results: It has been performed in 378 cases, of which trust-worthy accounts have been given. In 145 of these cases the women recovered; in 233 they died; or the recoveries were in the proportion of 38 per cent. or as one in 26 cases. The fate of 318 children is mentioned, of whom 219 were saved, 99 were lost, or the child survived in 68 per cent., or rather in more than 2 cases out of 3.—[*Dr. West's Report on Midwifery, from Retrospect.*]

---

*Beef-tea.*—When one pound of lean beef, free of fat, and separated from the bones, in the finely chopped state in which it is used for beef sausages or mince-meat, is uniformly mixed with its own weight of cold water, slowly heated to boiling, and the liquid, after boiling briskly for a minute or two, is strained through a towel from the coagulated albumen, and the fibrine, now becoming hard and horny, we obtain an equal weight of the most aromatic soup, of such strength as cannot be obtained, even by boiling for hours, from a piece of flesh. When mixed with salt, and the other usual additions by which soup is usually seasoned, and tinged somewhat darker by means of roasted onions or burnt sugar, it forms the very best soup which can in any way be prepared from one pound of flesh.—*Liebig, from Boston Med. and Surg. Journal.*

---

*The fate of the Physician.*—We extract the following from the columns of our esteemed contemporary, the *New York Annalist*:

“Another Physician, Dr. D. B. Hall, died yesterday—this is the fourth.”—*New Orleans paper.*

Such are the brief, cold terms in which the public are told that Medicine is offering up victim after victim, on the altar of professional duty.

Where are now the Hydropaths, Homeopaths, Root Doctors, and the whole legion of quacks? They are silent—they have probably fled to seek in some place of safety for dupes and victims. And where are now the slippant sneerers at the uncertainty of medical science—the “Doctors’ quarrels”—“the Doctors’ bills”—“the Doctors’ rapacity?” Silent all! no voice is heard to breathe a word of reproach or ridicule. No! no! the talk now is, “Our physicians are labouring, dying.” Such is the fate of Medicine and medical men. In the hour of suffering, or of danger, they are sought out with eager zeal and rewarded with garrulous gratitude: but let that hour pass, and the danger, and he whose skill averted it—the suffering, and he whose toil made it tolerable—are alike forgotten, and the public turn from their long-tried physician, and give the reward

which he has so dearly earned, to the ignorance, the impudence of the nostrum-vender, or the new system-man.

And what is our duty when thus treated? *Go onward! Look upward! Go onward!* the path of duty is before you. *Look upward!* the reward is on high.

---

## MEDICAL INTELLIGENCE.

**THE SOUTHERN MEDICAL AND SURGICAL JOURNAL.**—This No. completes the 3d Volume of the new series of this monthly Periodical; and by the first of January next the 4th Volume will have been commenced. We have so recently expressed our views and intentions (see July No.) respecting the work assigned us, and the character of the Journal is now so well known, that in terminating one and beginning a new volume, little need be said. During the past six months, for the first time since its establishment, all the original matter has been supplied *in advance*. This we think augurs well for its reputation. From it we take courage and are determined still to labor faithfully in the discharge of our arduous duties. We often feel our insufficiency for conducting this publication and know full well that without the kind and efficient co-operation of its contributors and friends, it could not be sustained. With all our sacrifices, industry, and anxiety to render the Journal useful, there are many faults for which to claim the considerate indulgence of the reader. The imperfections will, we hope, be passed over, and by practice, its character for the future may be improved. While striving all in our power to make the work acceptable and useful to our professional brethren, we trust they will still continue to aid us by their contributions to its pages. Communications on medical subjects, essays, reports of cases, reviews of works, synopses of journals, &c., &c., will be thankfully received.

The editor returns his sincere thanks to all those who have thus far kindly assisted him in carrying on the Journal. His public acknowledgements are due too, to the publishers of Medical works, who have generously supplied him, and also to editors of Medical journals, for a very liberal exchange.

For terms, &c., see the Publisher's Prospectus for Vol. IV. An increased patronage is respectfully solicited in his behalf,

---

### OUR EUROPEAN CORRESPONDENT.—LETTER II.

**Late alarming state of Surgeon Liston's Health.**—By the steamer Washington we have received another letter from our esteemed friend of Paris. We also give place to an interesting case kindly reported for the Journal, by a young English gentleman pursuing his studies in the French capitol, whose acquaintance we made during our late visit there. Further contributions from the same source are generously promised. Our correspondent too, says he will himself do the best he can for us.

The celebrated English Surgeon, LISTON, we are informed, suddenly lost his voice about the first September. A few days afterwards he felt something give way in his throat, and in a few minutes ejected from his mouth, without



cough, about thirty ounces of fluid blood. There was no return of the hemorrhage. Drs. Forbes, Watson, Walshe, and Stokes, (of Dublin,) all declare his lungs to be sound. Our correspondent thinks an abscess had formed near the vocal cords of the larynx. We are happy to add, Mr. L. is again in full vigorous health.

—

*Hopital de La Charité, Paris, Oct. 18th, 1847.*

**ANEURISMAL TUMOUR OF THE LEFT ARM.**—Sebastian, aged 22, a shoemaker, living No. 55 Rue Cherche Midi, entered the hospital. Constitution good, temperament sanguino-lymphatic, has generally lived in comfortable quarters and been well fed, has never committed any excess: since 8 years of age, has been accustomed to Epistaxis nearly every week, but has had no other hemorrhage; has never had syphilis, or any other serious affection, and has never been bled. In the month of March, 1843, without any appreciable cause, he felt a slight pain in the anterior part of the left elbow. Fifteen days after the appearance of this pain, just in the place where the tumour now exists, he felt a little swelling about the size of a pea, moveable, hard, not disappearing on pressure; and very slightly painful. This tumour grew gradually, and at the end of the year had acquired the volume of a small walnut: in the mean time it had become softer, *but at no period had it been the seat of pulsation*—the pain always remaining as at the commencement. The tumour gradually grew to its present size.

*Present state.*—At the anterior part of the elbow we perceive a tumour of a hemispherical form, a little flattened, limited externally by the tendon of the biceps muscle, stopping internally about one-third of an inch outside of the summit of the epitrochlea; it rises about two inches and a half above the humero-cubital articulation—it descends a little below this articulation. Its outward projection is about one inch; its circumference is irregular; its diameters are from three to four inches. In some points its circumference is easily limited—in others it is difficult to limit. It appears subaponeurotic; the skin is normal and non-adherent. The tumour is slightly moveable, but holds fast to the subadjacent parts. It is firm, slightly resistant, of unequal density, and fluctuating in its centre.

In examining the tumour with the fingers, there is no expansion, pulsation, or fremitus appreciable to the touch, and the stethoscope reveals nothing but the distant shock of the artery. The elbow enjoys all its movements without pain; the arm and forearm are completely healthy. The arteries of the affected member appear healthy, and exactly similar to those of the limb on the opposite side. General health good.

Three or four days after the entry of the patient, M. Velpeau made an explorative puncture into the centre of the tumour, and through the canula. Drop by drop came three table-spoonfuls of blood, which was red, and which quickly coagulated. The following days Velpeau thought he perceived an expansion of the tumour,

which seemed to diminish on pressure of the humeral artery, and appeared to increase when the pressure ceased. The tumour was then by firm and constant compression, continued for several days without intermission, reduced to one-fourth of its volume. Afterwards, when the artery was compressed, the tumour rested placid, but on removing this pressure the tumour resumed its original size.

Fifteen days of compression with the bandage produced no satisfactory or permanent result. After this time Velpeau tied the humeral artery, but no change took place in the tumour, and the same evening the pulse appeared in the radial artery. Permanent compression was then made for one month, without effect. On the 16th September, Velpeau traversed the tumour with eight needles, which rested three weeks and determined a good deal of inflammation and suppuration along the track of the needles.

October 12th. Needles withdrawn, and the tumour appears in its original condition.

[NOTE.—I mentioned this case in my letter from Paris—see page 637—*Aneurism*. EDT.]

You will remember having examined the above case, when you were at La Charité; and I dare say you will also recollect it had been seen by the most experienced and noted Hospital Surgeons of Paris, all of whom, after careful examination, had differed widely in their diagnosis. One supposed it to be a malignant tumour, another to be an enlarged bursa communicating with the articulation of the elbow-joint, &c. It was not till M. Velpeau found that it diminished or rather almost entirely disappeared on pressure, and after seeing that nothing but a quantity of arterial-looking blood flowed through the canula, that this the most learned and sagacious of French Surgeons, concluded that the tumour was formed by an aneurism. Any doubt, that he still retained, was removed, as soon as he ascertained that the canula could be moved freely in all directions within the walls of the sac.

Before proceeding to ligature the humeral artery about the middle of the upper arm, he stated that the tying of the artery in this situation, sometimes failed to cure the disease. He also alluded to the difficulties that might be caused by the chance of encountering a high division of the brachial. From the strong pulsation immediately above the tumour, he thought the distribution was in this patient normal. Notwithstanding these considerations, and after a full and careful review of all the circumstances of this very anomalous case, he stated, that he had decided—indeed deemed it his bounden duty, to prefer this mode of procedure, to the other alternative: that of laying open the sac and ligaturing the vessel both above and below it. This last kind of operation, he mentioned was much more certain, but likewise more difficult for the operator, and infinitely more painful and dangerous for the patient. And lastly, that it could be had recourse to ultimately, in the event of non-success after simple ligature above the tumour. I will keep you informed of its further

progress, and trust that in the mean while, you will be less perplexed relative to its true nature than I confess myself to be.

Monday, 18th Sept. There has not been any thing doing in the hospitals of late, except what you will see reported in the *Gaz. des Hopitaux*. Jobert has had two successful cases of vesico-vaginal fistula. Generally the operation is tedious and irksome, sometimes lasting for fully an hour. Jobert deserves much credit for his improved methods of treatment, and operating in these difficult cases. We are daily, however, seeing operations done in the various hospitals, in what would be deemed in England and the States, a careless, rude, and improper manner. The treatment of incised wounds has long been, and, with rare exceptions, still is, a theme of constant reprobation. Let us take, for example, the last operation, of consequence, an amputation of the leg. To arrest the bleeding—instead of the common dissecting forceps, a tenaculum was employed, by which the divided vessels were secured—and *a great deal more*. They don't stick at including a nerve here, if it comes in the way. Then, the ligatures were large and thick enough for the aorta of a horse. The flaps were retained by common pins, not over sharp at the points. The whole stump was finally enveloped with an enormous quantity of adhesive plaster, large lumps of agaric, and the usual superabundance of lint. They have no idea of trying to heal stumps by the use of light water dressings, whereby the parts are kept cool and excessive inflammatory action is often prevented.

Guerin, at the Necker, has about thirty times operated with happy results in cases of consecutive strabismus. The manipulations are nearly all sub-conjunctival. He brings forward the cut and retracted extremity of the divided muscle, and "engrafts it" of new, by fixing the tendon with a ligature, to the schlerotic coat—and, exactly in such a place, as afterwards to secure the parallelism of the organ. The ligature is retained in the wound for from five to six days. In fourteen cases Guerin run the thread right through the ball of the eye—of course perforating the retina, vitreous humor, &c., and that too, he asserts, without any ill consequences, excepting in two cases. In one of these last, he told me, "I passed the thread too much forward, too near the iris, and violent iritis was induced." I have carefully examined one case in which he operated five weeks ago. The patient, a powerful young man, had been treated for convergent strabismus of both eyes, by section of the recti interni, about a year ago. In consequence, as almost always happens, his sight, instead of being improved, was made worse—the eyes were turned quite outwards, with diplopia and great aberration of vision; nor could he even direct his finger to an object placed immediately in front of him. He is cured—the parallelism of the axis of vision is perfect, and he can direct his eyes equally well in all directions.

There is at this time (18th September,) in the service of M. Vidal, at the Midi Hospital, a case of complete transposition of the thoracic and abdominal viscera. The patient (Oct. 22)



entered with cirsocele of both sides, for which he has been cured by ligature with "enroulement." His constitution is vigorous; he is powerfully made, and has always enjoyed excellent health. The heart's action is easily perceived on the right side of the chest. M. Mailliot, who is here considered, next to Piorry, the most adroit and skilful in auscultation, and in the use of the stethoscope, has recently "explored him," with almost typographical minuteness, so that the outline of the various internal organs is "limited," or traced in the skin, by dark lines made with the nitrate of silver: that is, the situation of the liver is indicated in the left hypochondriac region, and the stomach and spleen in the right. The strange appearance these black lines present, reminds one forcibly of the coarse ugly maps of North America that were engraved over 150 years ago, presenting a striking contrast to the magnificent map of Georgia recently published.

The Academy has been, since you left, engaged almost exclusively in an unprofitable discussion on the comparative merits of lithotomy and lithotrixy. Civiale pretends that he cures 98 in the 100. But he admits, that they must all be cases carefully selected by himself, after he has examined them with particular attention, at different times during a period of one or two months, in many instances. Then, all those who die immediately after his operations are not to be counted, nor any of those who sink in consequence of the means used in exploration, nor any of those who succumb from the consecutive accidents arising therefrom. A pretty liberal deduction, indeed, but not more than is absolutely required.

At the sitting of the Academy of the 28th ult., having been very sore pressed, he was forced to admit the want of correctness of his tables, "that certain facts should not figure in his statistics, and that others were omitted." During the last six weeks he has been doing nothing worth reporting. He has not had one operation of lithotrixy at his hospital, although he examined several patients, and, to very little purpose. At this time, he is uncommonly nice and particular in the selection of cases. In one, there is stricture; in a second, enlarged prostate; in a third, thickened irritable bladder; and, in a fourth, fungous tumour, but unfortunately, with a very wide base of attachment, contra-indicating, therefore, all means of extraction. He said, at his clinic the other day, that the pain, inflammation, and contraction of the bladder, following lithotrixy, is never caused by the fragmentation of the calculus, but by the injudicious and prolonged efforts that too generally precede or accompany this process. In short, he attempted to swell out his little speciality, into something of gigantic dimensions, of mighty complexity, and extraordinary practical difficulty, by repeating a string of plausible mystifications, that may, perhaps, have caught some of the most verdant of his young auditors. He was not content, with glorifying and renowning himself; for, after having boasted for nearly an hour, under the influence, no doubt, of a delicate regard to the interests of truth, he told us, that Roux had four times, and Velpeau three times, performed

lithotomy in patients in whom no stone existed. As the excuse for reverting to this last statement, he proceeded to propound, that induration of the neck of the bladder is often mistaken for a calculus—that in doubtful cases sounding is insufficient and rubbing (*frottement*) deceptive—that the bladder should be explored when full, and when empty, to ascertain the size, and the condition of the parts—that his lithotriteur with two branches is the only proper instrument fitted for perfect exploration—that by opening and shutting it in the bladder a large field is exposed, and that by the "*va et vient*" (forward and backward movement) of the instrument, he can not only always discover the precise volume and form of the stone, but also of fungous tumours in the different parts of the bladder. Last Saturday he succeeded in removing several small prostatic calculi.

Dr. Smith, of Bartholomew's Hospital, was over here two weeks ago, and succeeded in getting authority to try the use of Ether at the Hopital of the Faculty in four cases of labour. Smith has published on this subject in the *Lancet*, and informed me that, far from ever having any bad effects, it soothes the pains, and produces singular relaxation of the perineum. He has prolonged the employment of ether for two hours and a half in difficult cases, and in one, particularly, for three hours and a quarter. Of course the ether is given every time the pains come on, and its use intermitted during the interval of remission.

1st Case (at clinique de Faculté). Succeeded pretty well; the labour was long, but the pains were steady, and of ordinary power, though not so frequent. Rather more sanguineous discharge, perhaps, than usual after separation of the placenta. 2d Case. A presentation of the head and right arm. This patient had had five previous accouchements; the infants all died immediately after birth. The same fatality occurred to this infant. 3d Case. Malformation of the upper straight of the pelvis. Long forceps were used: the child lived. After expulsion of the child, considerable hemorrhage. 4th Case. A phthisical patient. Did well during the labour; excessive hemorrhage after separation of the placenta. Cold applications were applied to the vulva, with frictions over the uterine region, and tight compression.

Dubois intends soon, to give the Ether quite a "big trial," as it is only by a large induction, carefully made, that proper deductions can be drawn. Meanwhile, the experiment is being made on a large scale in England, and in one or two places in France, and Belgium. In the *Gazette Médicale de Paris* of 9th October, is a long and elaborate communication by Dr. Jules Roux, of Toulon. He is of opinion, that in laborious labours the pain should be deadened by etherization; that the abdominal muscles in etheric intoxication continue to contract, while those of the perineum are relaxed; that no ill consequences arise to the mother or child, especially in what relates to hemorrhage, after parturition, or the secretion of the milk; and, finally, he adds, with some reserve, "that it appears to him, after

difficult parturition, as after surgical operations, one observes less inflammatory reaction, and that the utero-genital organs are sooner restored to their normal condition."

In the Medical Gazette of the 2d October, M. Roux publishes some cases wherein he had employed Ether—and as usual with Frenchmen, he does not know what has been done in England; for he says that science does not possess up to this day an observation of a double accouchement effected by art, when the woman was in an etheric state. He then cites at great length the particulars of a successful case of twins, where ether was used by him. The first child was delivered with the forceps; the second was extracted by the feet, as well as a large placenta, and both without pain to the mother. There was absence of strong contraction of the womb *immediately* after delivery, which was resumed, however, after a few minutes. The second case is one of presentation of the arm and shoulder, wherein he turned with extreme ease, and without the mother being conscious that any thing had been done to her. After delivery, the uterus contracted violently, he adds, "with happy consequences to the mother and child."

O. P. G.

---

HOPITAL DU MIDI, Paris, Oct. 16th, 1847.*Interesting Case of Tertiary Symptoms of Syphilis.*

A man named A——, aged 26 years, a baker, of a sanguine temperament and good constitution, was admitted into the Hopital du Midi, on the 24th of September, 1847, into one of Ricord's wards, No. 3, bed No. 22. This man was affected by blennorrhagia about seven years ago, which disappeared in three weeks without any treatment. It was followed by no constitutional accident. A year subsequently chancres appeared on the prepuce—these ulcerations cicatrized in a few weeks, but the subjacent tissues were indurated four weeks after cicatrization was completed. The inguinal glands were slightly engorged, but did not suppurate. The posterior cervical glands were also engorged from the patient's account. At the same time the hair began to fall off, and the hairy scalp became covered with impetigenous incrustations. There was also supraorbital cephalalgia, and palmar psoriasis in both hands. These symptoms excited the attention of the patient, and by the advice of a physician, he submitted himself to a mercurial treatment. Two months after this the above symptoms disappeared. From that time the throat was constantly the seat of irritations and ulcerations, which disappeared and re-appeared at different periods.

Two years ago these symptoms became more intense; numerous and separate ulcerations invaded the isthmus of the throat, and in the tongue were a number of very hard points, some of which ulcerated. The patient was treated with the Iodide of Potassium; at the end of eight months, all had completely disappeared. It is now six months, and no primitive accidents have supervened. The symptoms in the



throat re-appeared. M. Ricord treated them by the syrup of Cusnier, and the cure was effected in one and a half months. About five weeks since dull pains, increasing by the heat of the bed, invaded the right arm. Fifteen days after the accession of these pains, the movements of the arm began to become difficult, extension was incomplete. These symptoms increased to the present moment, when extension of the arm could only be effected to the extent of two-thirds. The pains then ceased. At the time the patient presented himself to us, the fore-arm was flexed on the arm at an angle of one hundred and forty degrees (French). No force was sufficient to straighten the arm. Now the patient no longer experiences any pain; the biceps is strongly contracted. On a level with the tendon of the biceps is felt a considerable thickness, which announces a commencement of plastic degeneration. In fact, no other symptoms are present which could be assigned to syphilis. From the history of the case, from the existence of muscular contraction, the first degree of plastic degeneration of the muscles and plastic degeneration of the aponeurosis of the tendon of the biceps, M. Ricord administered the Iodide of Potassium, (his treatment *par excellence* in tertiary accidents or symptoms).

25th September. Ptisans of hops, syrup of Gentian, three grammes of the Iodide of Potassium, per day. Straps of *Sparadrap of Vigo cum mercurio* were firmly applied around the arm.

4th October. The angle which before the treatment was only 140 degrees, at this time measures 180 degrees; the movements of the arm become more free, slight bronchitis, mobility of the fingers restored.

6th October. Complete extension of the arm, 195 deg. (French), movements entirely free, contractions have disappeared, and the slight thickening of the biceps tendon hardly perceptible.

M. Ricord, on account of some symptoms which manifested themselves in the thorax, discontinued the Iodide of Potassium.

We have often had occasion to notice the plastic degeneration of muscles. In the first stage of the disease the muscular tissue seems to coagulate and contract. In this instance, it is not a tonic retraction, but an entirely passive shortening which exists. After the retraction begins, there appears a plastic degeneration: so long as the alteration is not more advanced, it yields very readily to treatment, without leaving any deformity. But if this morbid process be permitted to proceed to organization, either atrophy by erosion, fibrous transformation, or rather a cartilagenous and osseous transformation, is the result. This latter consequence is always a permanent shortening of the affected muscle. These degenerations almost always invade the flexor muscles of the limbs. Before us we have an example on the tibialis anticus, which is one of the flexors of the foot on the leg. This affection is not generally painful, and the attention of the patient is only called to it by the inability of movement. Since Mr. Ricord has called the attention of pathologists to this kind of

degeneration, Mr. Bouisson, of Montpellier, has published a work in which he gives several cases of this nature. Mr. Ricord has also observed a curious case of plastic degeneration of the fibres of the heart. In this instance, the person having died, a *post-mortem* examination revealed the existence of plastic nuclei in the parietes of the heart.

All the tissues of the human body may participate in this alteration—the liver, the heart, the lungs, the brain, and the symptoms occasioned by it most generally are not different from those functional symptoms which exist in affections of these organs. We have at this moment a patient whose syphilitic history would be too tedious to narrate. About a month ago, he was seized with weakness or complete paralysis of the whole of the left side of the body,—at the same time he has on the surface of the skin nuclei or fibrous degenerations on cicatrices produced by *Rupia*. Since the appearance of these symptoms of hemiplegia, his intelligence and memory have almost completely disappeared, and he fell into a state of coma, refusing to eat, passing the contents of the bowels in bed, &c.—in a word, conducting himself like a paralytic, deprived of all his mental faculties. The left testicle was also the seat of plastic degeneration: We have every reason to believe that the same alteration existed at the base of the right hemisphere of the brain, and therefore resumed the use of the Iodide of Potassium, which had been discontinued some time before. At the present time, for about a month the Iodide of Potass. was carried to four grammes per diem. His intelligence and muscular power were restored; the appetite and the instinct of preservation, which had disappeared, returned.

We hope to be able to account for all these symptoms. The plastic nuclei may become organized in the cerebral substance as in other parts; and during the first period of their formation, the resolution of them may be accomplished, but if they are suffered to become organized, we can do no more than check their further development—then they terminate either in fibrous or cartilagenous or osseous organization, and act as foreign bodies in the cerebral mass. They are of a violet colour, and leave cicatrices in the cerebral substance, resembling traces of small apoplectic cysts.

The study of these tertiary syphilitic alterations have perhaps been too much neglected, and the contractions, fibrous nuclei, and other abnormal productions which we find in the tissues of the body, without often being able to explain their cause, are generally the result of syphilis.

(Signed,)

ROBERT MELCHIOR,

*Principal Interne of M. Ricord.*

---

*Discontinuance of the British and Foreign Medical Review, or Dr. Forbes' Journal.*—By the last No. (Oct.) of this periodical, we learn the confirmation of what had been before intimated, that its publication ceases; its editor retires, and hereafter the work is to be incorporated with the *Medico-Chirurgical Review*, so long known as *Johnson's Journal*. It is thus seen that the rivalry between

these two London medical quarterlies is at an end, and shaking hands together the two are henceforth to be blended into one. The British and Foreign Medico-Chirurgical Review, or Quarterly Journal of Practical Medicine, is the title of the new periodical, which is to appear the first of January, 1848.

Dr. Forbes has conducted his Journal for twelve years, and considering that it was wholly original, made up of reviews and notices of medical works, his labor was immense. How he discharged his onerous duties, seems wonderful; and yet he has found time to make a decided impression in the medical world by his own voluminous writings. He has done much good as a medical reformer, and conducted with ability an excellent Journal. The editor's purse is too often as empty as the poet's, and we regret in the present instance to say, that the receipts exhibit a deficit of some thousand dollars in the twelve years' publication of this work.

---

*The Prickly Ash as a remedial agent.*—Opposed as we are to the introduction of new articles of doubtful character into our already over-abundant *Materia Medica*, being much more desirous of ascertaining fully and satisfactory the virtues of those now admitted and acknowledged, we yet give place to the following extract of a letter from an intelligent physician of Washington, in this State:

"You wish to know my views in regard to the Prickly Ash, as a remedial agent. I have scarcely used it enough to predicate an opinion as to its real merits; though I am satisfied from the trials I have made with it in chronic rheumatism and secondary syphilis, that there is no article more deserving the attention of the profession than the one under consideration."

Our friend, Dr. BARRY, druggist, of this city, is now preparing a syrup from the extract of this article.

---

*Death of Dr. James A. Washington, of New York.*—During the present year, death has been busy in the professional ranks. Many a brother has fallen within the past twelve months; some in the tented field, others on or near the boisterous ocean, others again engaged in civil practice. Of all, and we say they are many, who have been called from their labours on earth, none stood fairer, higher, more honorable than did Dr. James A. Washington. It was our good fortune to make his acquaintance in Philadelphia, twenty years ago, where he had arrived from North Carolina, his native State, to study Medicine. We have subsequently watched his career through the Pennsylvania Hospital, been associated again with him in Paris, followed his return home to New York, and witnessed his rapid promotion to professional usefulness and renown in that great city. Dr. Washington was at one time elected a Professor, we think, of Clinical Medicine, in the New York University, but never entered upon his professorial duties. He re-visited Europe last year, and was a passenger on the Great Western during the dreadful storm she encountered in September. Anticipating a happy meeting on our own return from Europe, the summons at his door, on Broadway, New York, announced the unwelcome intelligence of his sudden death. He died of ulceration of the cæcum, produced by fæcal accumulation.

By the suavity of his manner, dignity of character, his modesty, his honesty,



his professional acquirement, his Christian virtues, no man promised more usefulness than did this friend—a worthy descendant of the Washington family.

*Candidates for the Professorship vacated by the death of A. Bérard.*—We learn from the Gazette Médicale de Paris, that Messrs. Laugier, Jobert, Robert, Michon, Vidal (de Cassis), Malgaigne, Chassaignac, Gosselin, Marchal, Huguiet, Ricord and Alquié, have already been inscribed as candidates. We have here a formidable array of talent and acquirement in the Medical Profession—several names well and favorably known even in this distant quarter of the world. The contest for the vacant Chair promises to be one of the most interesting ever held in Paris. It is for external pathology.

METEOROLOGICAL OBSERVATIONS, for October, 1847, at Augusta, Ga. Latitude  $33^{\circ} 27'$  north—Longitude  $4^{\circ} 32'$  west Wash. Altitude above tide 152 feet.

| Oct. | Sun Rise. |           | 2, P. M. |           | WIND. | REMARKS.                       |
|------|-----------|-----------|----------|-----------|-------|--------------------------------|
|      | THER.     | BAR.      | THER.    | BAR.      |       |                                |
| 1    | 50        | 29 77-100 | 81       | 29 75-100 | W.    | Fair.                          |
| 2    | 55        | " 77-100  | 81       | " 75-100  | W.    | Fair.                          |
| 3    | 56        | " 79-100  | 81       | " 81-100  | N.    | Fair—morning, some clouds.     |
| 4    | 58        | " 89-100  | 75       | " 85-100  | N. W. | Fair—a few clouds.             |
| 5    | 53        | " 87-100  | 76       | " 76-100  | S. W. | Fair.                          |
| 6    | 58        | " 69-100  | 82       | " 55-100  | S. W. | Fair—cloudy afternoon.         |
| 7    | 62        | " 53-100  | 80       | " 53-100  | S. W. | Cloudy—rain at night 20-100.   |
| 8    | 56        | " 52-100  | 74       | " 50-100  | N. W. | Fair—breeze.                   |
| 9    | 50        | " 61-100  | 74       | " 67-100  | W.    | Fair.                          |
| 10   | 49        | " 74-100  | 79       | " 73-100  | S. W. | Fair.                          |
| 11   | 52        | " 74-100  | 81       | " 75-100  | W.    | Fair.                          |
| 12   | 54        | " 74-100  | 81       | " 68-100  | S. W. | Fair—some clouds.              |
| 13   | 64        | " 48-100  | 68       | " 48-100  | W.    | Cloudy—sprinkle.               |
| 14   | 44        | " 64-100  | 64       | " 68-100  | N. W. | Fair.                          |
| 15   | 40        | " 83-100  | 66       | " 87-100  | N. E. | Fair }                         |
| 16   | 40        | " 95-100  | 68       | " 90-100  | N. E. | Fair } slight frost—very dry.  |
| 17   | 50        | " 92-100  | 74       | " 90-100  | N. E. | Fair.                          |
| 18   | 48        | " 92-100  | 76       | " 88-100  | N. E. | Fair.                          |
| 19   | 49        | " 86-100  | 78       | " 82-100  | N. W. | Fair.                          |
| 20   | 52        | " 86-100  | 80       | " 82-100  | E.    | Fair.                          |
| 21   | 59        | " 96-100  | 71       | " 80-100  | N.    | Fair—cloudy this morning.      |
| 22   | 55        | " 94-100  | 78       | " 88-100  | S.    | Fair—some clouds.              |
| 23   | 62        | " 85-100  | 81       | " 78-100  | S.    | Fair—some clouds.              |
| 24   | 65        | " 80-100  | 80       | " 70-100  | S.    | Fair—mist this morn.—breeze.   |
| 25   | 53        | " 70-100  | 71       | " 73-100  | W.    | Cloudy—rain last night 35-100. |
| 26   | 53        | " 95-100  | 68       | " 99-100  | N. E. | Fair—breeze.                   |
| 27   | 48        | 30 10-100 | 63       | 30 10-100 | N.    | Fair.                          |
| 28   | 42        | " 25-100  | 57       | " 25-100  | N.    | Fair—breeze.                   |
| 29   | 38        | " 25-100  | 59       | " 20-100  | N. E. | Fair—light frost—still dry.    |
| 30   | 42        | " 15-100  | 68       | " 7-100   | N. W. | Fair.                          |
| 31   | 42        | " 5-100   | 69       | "         | N. E. | Fair.                          |

28 Fair days. Quantity of Rain 55-100 of an inch. Wind East of N. and S. 8 days. West of do. 16 days.

ERRATA.—Page 708, line 21, for cerebral read *central*; page 711, line 9, insert *false* before labour-pains.

# INDEX TO VOL. III.

## OF CONTRIBUTORS.

|  | PAGE |  | PAGE     |
|--|------|--|----------|
| Barr, W. F., M. D. On irritation of the spinal marrow, and ganglia of the sympathetic nerve, . . . . .                                 | 82   | Eve, Paul F., M. D. Review of Jones' Ophthalmic Medicine and Surgery, . . . . .  | 335      |
| Barr, W. F., M. D. On propriety of large doses of calomel in Dysentery and Cholera Morbus, . . . . .                                   | 10   | Eve, Paul F. M. D. Review of the London Lancet, . . . . .  | 658      |
| Barton, E. H., M. D. Surgeon U. S. Army—Mortality at Vera Cruz, . . . . .  | 571  | Ford, Lewis D., M. D. On Intermittent Fever, . . . . .   | 129      |
| Beal, L. B., M. D. Case of gun-shot wound, . . . . .   | 202  | Ford, Lewis D., M. D. Review of Dr. Wood's Practice, . . . . .   | 730      |
| Blackburn, J. C. C., M. D. The Strawberry leaf, a valuable auxiliary in the treatment of chronic dysentery, . . . . .                  | 657  | Gaither, Henry, M. D. Colic relieved by balsam copaiva, . . . . .  | 462      |
| Branch, Franklin, M. D. Case of Cauliflower excrescence of the os tincæ, cured, . . . . .  | 275  | Garvin, I. P., M. D. Purpura Hemorrhagica, . . . . .   | 526      |
| Campbell, H. F., M. D. Practical observations on Cutaneous diseases, . . . . .   | 449  | Garvin, I. P., M. D. Remarks on Medical Reform, . . . . .  | 532      |
| Campbell, H. F., M. D. Treatment of Hooping-cough with the Iodide of Potassium, . . . . .  | 602  | Gordon, James M., M. D. Contributions to Practical Midwifery, with cases occurring in obstetrical practice, . . . . .          | 703      |
| Colley, Francis S., M. D. An Essay on Turning, . . . . .   | 193  | Harden, John M. B., M. D. Notes on the medicine of Moses, . . . . .  | 257      |
| Cunningham, Sam'l B., M. D. Locality, climate and diseases of East Tennessee, . . . . .  | 385  | Harden, John M. B., M. D. Of Mercury and its compounds, . . . . .  | 575      |
| Davis, John, M. D. Cases cured by blistering the spine, . . . . .  | 270  | Harden, John M. B., M. D. Translation of Dumas' researches on the blood, . . . . .   | 16       |
| Davis, John, M. D. Treatment of Pneumonia, . . . . .   | 328  | Hitchcock, C. M., M. D., U. S. A. Report on the sick and wounded of the 2d Division of the U. States Army in Mexico, . . . . . | 406      |
| Dugas, L. A., M. D. Address to the Class of the Med. College of Ga., . . . . .   | 64   | Kollock, P. M., M. D. Case of Traumatic Tetanus, cured by Strychnine, . . . . .  | 597      |
| Dugas, L. A., M. D. A case of Glands in the human subject, . . . . .   | 653  | Kollock, P. M., M. D. Resection of a portion of the upper maxillary bone, . . . . .  | 457      |
| Dugas, L. A., M. D. On the use of Quinine in Intermittent and Remittent fevers, . . . . .  | 1    | LeConte, John, M. D. On Sulphuric Ether, . . . . .   | 253      |
| Eve, Jos. A., M. D. Cases of Convulsions and other nervous affections during pregnancy, parturition and the puerperal state, . . . . . | 513  | Leconte, John, M. D. Review of Dowler on the Natural History of the Alligator, . . . . .                                       | 89       |
| Eve, Jos. A., M. D. Pregnancy and Parturition with cancer of the uterus, . . . . .   | 198  | Little, Robert Edmonds, M. D. Observations on various diseases, . . . . .  | 141      |
| Eve, Paul F., M. D. Amputation of the fore-arm, . . . . .  | 204  | Letters from our Paris Correspondent, . . . . .  | 695, 758 |
| Eve, Paul F., M. D. Case of mechanical obstruction in the bowels, . . . . .  | 13   | Martin and Smith, Drs. Case of Adherent Placenta, with Hour-glass contraction, . . . . .                                       | 728      |
| Eve, Paul F., M. D. Letter from Paris . . . . .  | 636  | Mayes, J. A., M. D. Application of creosote to the treatment of Diarrhœa and Dysentery, . . . . .                              | 147      |
| Eve, Paul F., M. D. Remarks on Dr. Hitchcock's Report, . . . . .   | 407  | Mayes, J. A., M. D. Injury of the medulla spinalis—death: autopsy, . . . . .   | 725      |
| Eve, Paul F., M. D. Review of American Journ. Med. Sciences, . . . . .   | 467  | Means, A., M. D. Alcohol, . . . . .  | 65       |

|  |   |
|--|---|
| Means, A., M. D. Sulphuric Ether, 255  | of all the depending portions of the body, . . . . . 410                              |
| Melchoir, Robert Dr. Report of case in Paris—tertiary syphilis, . . 766  | Pendleton, E. M., M.D. Poisonous properties of Sulphate of Quinine 605                |
| Norwood, Wesley C., M. D. Malignancy, . . . . . 396  | Quintard, Chas. T., M. D. Febris Typhoides, . . . . . 465                             |
| Norwood, Wesley C., M. D. Malignancy, . . . . . 717  | Quintard, Chas. T., M.D. Random thoughts on Febris Typhoides, . . 639                 |
| Oakman, Erwin H., M. D. Experiments on Rabbits with opium and its preparations . . . . . 334   | Tutt, G. M., M.D. Penetrating and lacerated wound of the abdomen cured, . . . . . 656 |
| Pearson, B. H., M. D. Notice of a highly malignant disease, . . . . 332  | Twiggs, John D. Case of Tape-Worm, . . . . . 413                                      |
| Pendleton, E. M., M. D. Case of Rupture of the Fibro-cartilage and ligaments between the 3d and 4th cervical vertebræ with paralysis | Wooten, H. V., M. D. Cases and Comments . . . . . 321                                 |

## INDEX OF ARTICLES.

|  | P e     | Page |
|--|---------|------|
| Abdomen, penetrating and lacerated wound of, cured . . . . .                               | 656     | 312  |
| Abdomen, wounds and injuries of . . . . .  | 680     | 370  |
| Abortion, prevention of . . . . .  | 692     |      |
| Adulterations of various substances used in medicine and the arts . . . .                  | 53      |      |
| Alcohol . . . . .  | 65      |      |
| Alcohol, means of ascertaining its purity . . . . .  | 635     |      |
| Alkaline remedies, on the abuse of . . . .   | 366     |      |
| Alligator, on the natural history of . . . .   | 89      |      |
| Alnus serrulata, remarks on . . . . .  | 630     |      |
| Amenorrhœa, local treatment of . . . . .   | 748     |      |
| American Journ. Medical Sciences . . . .   | 467     |      |
| Amputation of the fore-arm . . . . .   | 204     |      |
| Anatomy, handbook of human . . . . .   | 349     |      |
| Anatomy, pathological of the human body . . . . .  | 349     |      |
| Anatomy, system of human . . . . .   | 350     |      |
| Aneurism at the elbow, &c. . . . .   | 637-759 |      |
| Aneurism by compression . . . . .  | 307     |      |
| Aneurism, observations on and treatment . . . . .  | 623     |      |
| Aneurism, operation for . . . . .  | 62      |      |
| Annalist, notice of . . . . .  | 447     |      |
| Anus, fissures of . . . . .  | 691     |      |
| Aperients, mode of administering to children . . . . .                                     | 694     |      |
| Arsenic, poisoning by, successfully treated . . . . .                                      | 498     |      |
| Arteries, effect of injecting various substances into . . . . .                            | 563     |      |
| Arteries, application of ligatures to . . . .  | 481     |      |
| Arteries, statistics of mortality consequent on tying the carotid and innominata . . . . . | 505     |      |
| Arteries, Prof. Porta on deligation of . . . .   | 63      |      |
| Asafœtida, its use in obstetrics . . . . .   | 634     |      |
| Ascarides, treatment of . . . . .  | 250     |      |
| Ascarides of the rectum, treated . . . . .   | 250     |      |
| Ascites, the urine in . . . . .  | 690     |      |
| Ascites . . . . .  | 123     |      |
| Ascites, iodide of starch for . . . . .  | 441     |      |
| Ascites, remarkable case of . . . . .  | 372     |      |
| Asiatic Cholera in Persia . . . . .  | 187     |      |
| Ash, prickly . . . . .   | 767     |      |
| Asphyxia Neonatorum . . . . .  |         | 312  |
| Asthma and whooping-cough, ether in . . . .  |         | 370  |
| Baker, Dr. Abner, (a monomaniac) life and trial of . . . . .                               |         | 248  |
| Bandages, starch, use of . . . . .   |         | 750  |
| Bed-sores prevented . . . . .  |         | 251  |
| Beef-tea . . . . .   |         | 757  |
| Berard, Augustus, obituary of . . . . .  |         | 192  |
| Bichloride of Mercury combined with Tartar Emetic . . . . .                                |         | 188  |
| Bile . . . . .   |         | 54   |
| Bi-Penis, case of . . . . .  |         | 439  |
| Blisters, effects of on young subjects . . . .   |         | 682  |
| Blistering with camphorat. ointment . . . .  |         | 629  |
| Blood, researches upon the . . . . .   |         | 16   |
| Bones, inflammation of, treated . . . . .  |         | 185  |
| Bone, resection of the upper maxillary . . . . .   |         | 457  |
| Bones, new method of excising, &c. . . . .   |         | 566  |
| Bostock, obituary of . . . . .   |         | 192  |
| Botany, Medical . . . . .  |         | 755  |
| Bowels, fatal case of mechanical obstruction in . . . . .                                  |         | 13   |
| Bowel complaints, Iodine liniment in . . . .   |         | 183  |
| Brain, concussion of, treated . . . . .  |         | 176  |
| Bright's diseases treated, . . . . .   |         | 251  |
| Bromide of Potassium substitute for the Iodide . . . . .                                   |         | 374  |
| Bronchitis, chronic, treated by strychnine . . . . .                                       |         | 426  |
| Broussais, C., death of . . . . .  |         | 638  |
| Buffalo University . . . . .   |         | 573  |
| Bullet. of Med. Science discontinued . . . .   |         | 191  |
| Burns, blisters, &c., prescriptions for . . . .  |         | 64   |
| Burns, cold water in . . . . .   |         | 745  |
| Burns, treatment of . . . . .  |         | 628  |
| Cachexia treated . . . . .   |         | 173  |
| Cæsarian section—child lives . . . . .   |         | 511  |
| Cæsarian section, statistics . . . . .   |         | 757  |
| Cajeput oil as a remedial agent . . . . .  |         | 633  |
| Calculus, large . . . . .  |         | 319  |
| Calculus salivary, mistake respecting . . . .  |         | 213  |
| Camphor, case of poisoning by . . . . .  |         | 370  |
| Camphorated Blistering Ointment . . . . .  |         | 629  |



|  |         |   |               |
|--|---------|---|---------------|
| Cancer, opium dressing for.....        | 123     | Diabetes, treatment of.....             | 315           |
| Cancer of the stomach.....             | 40      | Diagnosis, necessity for accuracy in    | 55            |
| Cancer, relapse of.....                | 122     | Diagnosis, a point of between Rub-      |               |
| Candidates for professorship in Paris  | 768     | cola and Scarlatina.....                | 56            |
| Carminatives and Tonics.....           | 694     | Diarrhœa, employment of bismuth in      | 251           |
| Cases and Comments.....                | 321     | Diarrhœa and Dysentery, treatment       |               |
| Castor oil emulsion.....               | 317     | of by creosote.....                     | 147           |
| Castor oil, method of disguising the   |         | Diarrhœa and dysentery treated with     |               |
| taste of.....                          | 187     | preparations of the walnut tree..       | 59            |
| Cataract, removal of by aspiration     | 373     | Diarrhœa, hydrate of lime in.....       | 60            |
| Cataract under the influence of mer-   |         | Diet of the Ancients.....               | 658           |
| cury.....                              | 756     | Digestion in 1846.....                  | 54            |
| Cauliflower excrescence of the os      |         | Diseases of the army of invasion...     | 293           |
| tincæ cured.....                       | 275     | Diseases, &c. of East Tennessee....     | 385           |
| Chemistry, notice of works on.....     | 52      | Diseases, observations on various..     | 141           |
| Cherry bark syrup.....                 | 694     | Diseases, camp, some remarks on,        |               |
| Chest, fallacies attending physical    |         | in Southern climates.....               | 151           |
| diagnosis in diseases of.....          | 235-414 | Drastic potion.....                     | 184           |
| Chloride of Sodium, therapeutical      |         | Drinking intoxicating liquors, re-      |               |
| action of.....                         | 58      | sults of.....                           | 313           |
| Chlorosis, diagnosis and treatment     |         | Dropsy, prescription for.....           | 60            |
| of.....                                | 56-59   | Dysentery and cholera morbus, pro-      |               |
| Chorea, nux vomica in.....             | 57      | priety of large doses of calomel in     | 10            |
| Cicatrices of the variolous pustule    |         | Dysentery Syrup.....                    | 59            |
| prevented.....                         | 188     | Dyspepsia and Diet.....                 | 658           |
| Clinical medicine, lectures on....     | 182     |   |               |
| Colic relieved by balsam Copaiva..     | 462     | Ear, extraction of a piece of pewter    |               |
| Colites acute, treated by injection of |         | from the.....                           | 127           |
| nitrate of silver.....                 | 507     | Editor's notice and remarks.....        | 446           |
| Conception, extra uterine.....         | 637     | Electricity, influence of on the hu-    |               |
| Confectionary, bronzing of.....        | 692     | man system.....                         | 625           |
| Confinement, on rising too early after | 678     | Emetics, effects of on young subjects   | 50            |
| Congestive fever, practical remarks    | 355     | Encyclopedia Americana, notice of       | 182           |
| Congestive fever.....                  | 485     | Epilepsy, treatment, &c....             | 698, 700, 636 |
| Convalescence from acute diseases,     |         | Epsom salts, to remove bitterness of    | 693           |
| management of.....                     | 364     | Epsom salts, a substitute for as a      |               |
| Convulsions during Pregnancy and       |         | purgative.....                          | 693           |
| Parturition.....                       | 513     | Epistaxis, treatment of by insuffla-    |               |
| Convulsions in infants.....            | 697     | tions of alum.....                      | 251           |
| Cornea, observations on the curabil-   |         | Erysipelas following vaccination..      | 665           |
| ity of opacities of the.....           | 244     | Erysipelas, treatment of by camphor     |               |
| Correspondents, our European.....      | 695-758 | in ether.....                           | 444           |
| Corrosive sublimate, incompatibles     |         | Erysipelas, Ung. Potassæ in.....        | 186           |
| with.....                              | 186     | Ether, inhalation of in obstetric       |               |
| Coryza, prescriptions for.....         | 446     | practice.....                           | 519           |
| Cotton, mode of detecting the pre-     |         | Ether preparations, physiological       |               |
| sence of in linen.....                 | 636     | action of.....                          | 606           |
| Cretinism of large cities.....         | 564     | Ether, substitute for to produce in-    |               |
| Croup, treatment of.....               | 495     | sensibility.....                        | 510           |
| Croup, observations on.....            | 35      | Ether vapor of in asthma and hoop-      |               |
| Cupping, employment of gun cot-        |         | ing cough.....                          | 370           |
| ton in.....                            | 187     | Ether, fatal effects of inhalation of   | 374           |
| Cutaneous diseases, practical obser-   |         | Ether, sulphuric inhalation of, pro-    |               |
| vations on.....                        | 449     | duces insensibility.....                | 226           |
| Cystitis, treatment by nitrate of sil- |         | Ether, sulphuric inhalation of in       |               |
| ver injection.....                     | 740     | surgical operations.....                | 252           |
|  |         | Ether, mode of administering.....       | 665           |
| Death by Strychnine.....               | 492     | Ether in surgical operations.....       | 666-637       |
| Death, new sign of.....                | 63      | Etherization, effects of on respiration | 626           |
| Death, to distinguish apparent from    |         | Extra-uterine conception.....           | 637           |
| real.....                              | 370     | Eye, treatise on diseases of.....       | 350           |
| Debility and loss of appetite treated  | 446     |   |               |
| Deglutition excited by dashing cold    |         | Fat, formation of in the animal body    | 249           |
| water on the face.....                 | 248     | Febris Typhoides, random thoughts       |               |
| Delivery, premature excited.....       | 635     | on.....                                 | 669-465       |
| Detecting cotton in linen.....         | 636     | Fever a disease of the spleen.....      | 499           |

- Fever, statistics of cases of miasmatic 241  
 Fevers, Intermittent and Remittent, treatment with quinine. . . . . 1  
 Fever, typhoid, Ethiop's mineral in 755  
 Fracture, compound case of bad . . . 174  
 Ganglions, treatment of . . . . . 316  
 Gastrotomy, remarks on . . . . . 108  
 Generation, the function of . . . . . 666  
 Genitals in children, epidemic disease of . . . . . 127  
 Georgia Medical So., report of the 648  
 Gestation, disputed period of . . . . 502  
 Glanders in the human subject, a case of . . . . . 653  
 Globular body found in the stomach of an ox . . . . . 318  
 Gonorrhea, treatment and prescriptions for . . . . . 61, 316, 511  
 Graduates of the Medical College of Georgia . . . . . 318  
 Gun Cotton, mode of preparing . . 256  
 Hæmostatic, Ergoline as a . . . . . 121  
 Hæmostatic property of *Secale Cornutum* . . . . . 509  
 Hail storm of May, 1847 . . . . . 384  
 Hare, Prof. resignation of . . . . . 572  
 Headache, varieties of . . . . . 683  
 Heart, use of digitalis in diseases of 438  
 Heart, movement of, &c. . . . . 562  
 Hemorrhage from leech bites arrested . . . . . 62  
 Hemorrhage from the nose . . . . . 445  
 Hemorrhoids, Tinct. of Iodine to . . 123  
 Hiccough protracted, relieved . . . 628  
 Homœopathy . . . . . 119, 190  
 Honors conferred on medical men 666  
 Hooping cough, alkalies in . . . . . 59  
 Hooping cough, treatment of } 602, 497  
   } 442, 314  
 Hydriodate of arsenic and mercury, 371  
 Hydriodate of Potassa, on the use of 306  
 Hydrocele, comparison of tr. iodine and vinous injection in . . . . . 184  
 Hydrocephalus successfully treated . . . . . 309, 565  
 Hydropathy, or the cold water cure 45  
 Hydrophobia, the Marchand remedy for . . . . . 188  
 Hysteria, inhalation of ether in . . . 661  
 Hysteria, pathology and treatment of 250  
 Hysterical, nervous and sleepless cases . . . . . 446  
 Inhalation, fatal effects of . . . . . 374  
 Insane in France, number of . . . . . 126  
 Insanity, hereditary transmission of 626  
 Insanity, treatment of acute forms of 688  
 Insensibility, new method of producing . . . . . 666  
 Intermittent fever, strychnine in . . 565  
 Intermittent fever, Tinct. of Iodine in obstinate cases . . . . . 121, 689  
 Intermittent fever, forms, treatment, &c. . . . . 129  
 Intermittent fever, on the types of . 57  
 Intermittent fever treated with sulphuric ether . . . . . 689  
 Iodine, internal administration of . . 70  
 Iodide of Iron, on the syrup of . . . 632  
 Iodide of Mercurial Chloride, preparation of . . . . . 568  
 Iodine, proper diet in conjunction with . . . . . 369  
 Irritation of the Spinal Marrow and Ganglia of the sympathetic nerve 82  
 Joints, diseases of and treatment . . 624  
 Journal, British and Foreign Review 766  
 Journal, South. Med. and Surg. 190, 758  
 Labour, ether in . . . . . 763  
 Lactation, case of protracted . . . . 441  
 Lactation, protracted . . . . . 317  
 La Lancette Canadienne . . . . . 383  
 Lamar, Dr. appointed assistant surgeon U. S. A. . . . . 191  
 Larynx, diseases of . . . . . 696  
 Leeches . . . . . 699  
 Leeches, method of making them bite 126  
 Lisfranc, death of . . . . . 448  
 L. ston's illness . . . . . 758  
 London Lancet, review of . . . . . 658  
 Lung, gangrene of . . . . . 700  
 Malaria and malarial diseases . . . 159  
 Malignancy . . . . . 396, 717  
 Malignant disease, case of . . . . . 332  
 Mania, for violent, with deficient urinary secretion . . . . . 446  
 Materia Medica and Therapeutics, notice of a work on . . . . . 247  
 Medical association, standing committees of . . . . . 570  
 Medical reform in Canada . . . . . 572  
 Medical College of Georgia . . . . . 695  
 Medical Botany . . . . . 623  
 Medical Ethics . . . . . 537  
 Medical Intelligence . . . . . 512  
 Medical Miscellany . . . . . 447, 512  
 Medical Reform, new plan of . . . . 301  
 Medical topography of Texas . . . . 293  
 Medical Institutions in U. S. . . . . 319  
 Medical Sciences, abstract of . . . . 181  
 Medical school, another (the 5th) in Philadelphia . . . . . 191  
 Medicated milk . . . . . 182  
 Medicine, clinical . . . . . 753  
 Medicines, adulteration of . . . . . 671, 701  
 Medicine of Moses . . . . . 257  
 Medulla Spinalis, injury to—death 725  
 Membrana decidua, nature of . . . . 661  
 Mercury and its compounds . . . . . 575  
 Mercury, nitrate acid of . . . . . 694  
 Mercury, effects of on young subjects 218  
 Mercurial preparations, use and abuse of . . . . . 437  
 Meteorological observations, by P. F. Eve, at the end of each No.  
 Midwifery, contributions with cases 703  
 Midwifery, use of Ether vapor in the practice of . . . . . 251

|  |               |   |          |
|--|---------------|---|----------|
| Midwifery, statistics of.....  | 186           | Pneumonia, treatment of.....  | 169, 328 |
| Milk a purgative.....  | 319           | Pneumonia, physical sign of.....                                      | 506      |
| Mortality in Vera Cruz.....  | 571           | Poisoning from nitric acid.....                                       | 500      |
| Mortality in New Orleans.....  | 573           | Poisoning from swallowing percus-<br>sion caps.....                   | 443      |
| Mortality in Prisons.....  | 573           | Poisons, law of Prussia respecting<br>sale of.....                    | 512      |
| Mucous membranes, castor oil in<br>diseases of.....                  | 183           | Practice of Medicine by Dr. Wood,<br>review of.....                   | 730      |
| Nævi, cure of.....   | 445, 691      | Pregnancy, case of interstitial uter-<br>ine.....                     | 663      |
| National Medical Convention, pro-<br>ceeding of.....                 | 320, 532      | Pregnancy, exhibition of assafœtida<br>during.....                    | 373      |
| Do. do. code of medical ethics of.....                               | 537           | Pregnancy and parturition with can-<br>cer of the uterus.....         | 198      |
| Do. do. organization of.....   | 374           | Prisons, mortality in.....  | 573      |
| Do. do. notice of.....   | 191           | Prize essay of the Louisiana Medi-<br>co-Chirurgical Society.....     | 383      |
| Nature, mystery of, explained.....                                   | 126           | Pruritus ani et vulvæ, treatment of.....                              | 249      |
| Nerves, on accidents from puncture.....                              | 434           | Psoriasis Inveterata.....   | 690      |
| Nervous diseases, on diagnosis of.....                               | 351           | Pulmonary tuberculization, topical<br>use of croton oil in.....       | 689      |
| Neuralgia, belladonna in.....  | 371           | Pulse, on the frequency of, &c.....                                   | 503      |
| Neuralgia, coffee a remedy for.....                                  | 442           | Purpura hemorrhagica.....   | 526      |
| Neuralgia, extract of tobacco in.....                                | 121           | Purulent infection.....   | 744      |
| Neuralgia, endermic application of<br>belladonna in.....             | 371           | Quinia, arseniate of.....   | 443      |
| Neuralgia, purgatives in.....  | 756           | Quinine, sulphate, poisonous prop-<br>erties of.....                  | 605      |
| New-York, University of.....   | 573           | Quinine, influence of coffee on.....                                  | 441, 63  |
| Nitrate of silver, therapeutic action of.....                        | 687           | Quinine, on use of.....   | 367      |
| Nitric acid, poisoning from.....                                     | 500           | Quinine, sulph., cause of blindness.....                              | 313      |
| Notice of Volume III.....  | 64            | Quinine, sulph., action on the spleen.....                            | 248      |
| Obituary notices.....  | 192, 384, 574 | Quinine, use of in Florida.....                                       | 167      |
| Oil of common fish instead of oleum<br>jecoris aselli.....           | 442           | Quinine, mode of using.....   | 184      |
| Opium, cold water in over-doses of.....                              | 433           | Quinine, topical application of.....                                  | 47       |
| Opium and its preparations.....                                      | 334           | Rabbit, opium not poison to the.....                                  | 126, 334 |
| Opium, use of in inflammation.....                                   | 738           | Rattle snake, cure for the bite of.....                               | 61       |
| Ophthalmic medicine and surgery.....                                 | 335           | Rectum, vast fæcal accumulation in.....                               | 172      |
| Ophthalmy, purulent, nature of and<br>treatment.....                 | 700           | Rectum, prolapsus of, treated.....                                    | 185      |
| Ophthalmy, solution of common salt in.....                           | 123           | Remarks on the surgeon's report of<br>the U. S. A.....                | 407      |
| Orchitis, treatment of.....  | 42            | Remittent fever, treated.....   | 60       |
| Osteo-sarcoma, excision of the infe-<br>rior maxillary bone for..... | 165           | Report of action of Georgia Medical<br>Society on the Convention..... | 648      |
| Pain in the side in thoracic inflam-<br>mation.....                  | 316           | Report, medical and surgical, from<br>the army of Mexico.....         | 277      |
| Paralysis, electro-magnetic currents<br>in.....                      | 177           | Report of the sick and wounded of<br>2d division of U. S. A.....      | 406      |
| Paraphimosis, new mode of reducing.....                              | 445           | Report, partial, of the battle of Buena<br>Vista.....                 | 319      |
| Pariset, death of.....   | 663           | Rheumatism, chronic, prescription<br>for.....                         | 314      |
| Parturition, lectures on natural and<br>difficult.....               | 311           | Rheumatism, acute articular, treat-<br>ment of.....                   | 636      |
| Pectoral syrup.....  | 693           | Rheumatism and gout, pyro-acetic<br>spirit.....                       | 756      |
| Pharmacopœia prescriber's.....                                       | 53            | Rib, a triplet.....   | 192      |
| Philosophy of animated existence.....                                | 351           | Ribs, fractured, new method of treat-<br>ing.....                     | 436      |
| Phimosis, ingenious operation for.....                               | 415           | Rupture of the sclerotica and iris.....                               | 661      |
| Phthisis, cod-liver oil in.....                                      | 249           | Salivation, chlorate of potassa in.....                               | 690      |
| Physic, principle and practice of.....                               | 754           | Salivation, mercurial, new remedy<br>for.....                         | 183      |
| Physician's duty to his brethren and<br>quacks.....                  | 663           |   |          |
| Physician's fate.....  | 757           |   |          |
| Physiology, principles of human.....                                 | 754           |   |          |
| Placenta, adherent with hour-glass<br>contraction.....               | 728           |   |          |
| Placenta, structure and functions of.....                            | 501           |   |          |
| Placenta, on extraction of before the<br>child.....                  | 373           |   |          |
| Plague and quarantine.....   | 115           |   |          |



- Scammony, action of..... 511
- Sclerotica and iris, rupture of..... 661
- Scrofula, conclusions in..... 61
- Scrofula, nature, causes, treatment 312
- Sea-sickness, remedy for..... 57
- Sea-sickness, nature & treatment of 617
- Secale cornutum, hemostatic property of..... 509
- Sex, cases of doubtful.... 504, 118, 676
- Skin, diseases of, treated..... 699
- Skin, diseases, local treatment.... 63
- Skin, on the therapeutical employment of certain medicines in diseases of..... 224
- Skin, efficacy of creosote on papular affections of..... 184
- Skin, topical treatment of certain diseases of..... 63
- Skull, strength of the human..... 183
- Smell, sense of destroyed and how.. 440
- Solution of hydriodate of arsenic and mercury..... 371
- Sore, mercurial, diagnosis of..... 686
- Sphincter ani, subcutaneous division of..... 316
- Spinal irritation, observations on.. 260
- Spleen, influence of quinine on its volume..... 749
- Spleen, inflammation and suppuration of..... 747
- Spine, cases cured by blistering the 270
- Stains on linen from nitrate of silver, removed..... 694
- Statistics of Medical Institutions in U. S. for 1846-7..... 383
- Stereoscope..... 187
- Stomach, irritability of treated.... 314
- Strabismus, consecutive..... 761
- Stramonium seed, effects of one.... 443
- Strawberry leaf in chronic dysentery 657
- Struma, cod-liver oil in..... 688
- Surgery, operative, by Velpeau... 311
- Surgical cases at Monterey..... 285
- Surgical operations after inhalation of ether..... 29
- Swelling, white, treatment of..... 62
- Syphilis infantum..... 180
- Syphilis, constitutional, treatment in infants..... 444
- Syphilis, constitutional, prescription for..... 511
- Syphilis, primary, treatment of.... 428
- Syphilis within the os uteri..... 317
- Syphilitic eruptions of the skin, prescription for..... 511
- Syphilis, tertiary symptoms..... 764
- Tape worm, case of..... 413
- Teeth, short rules for preserving the 188
- Tennessee, East, locality, climate, and diseases of..... 385
- Tetanus, traumatic, history of 7 cases successfully treated..... 22, 597
- Thompson, John, M.D., obituary of 192
- Tongue, semiology of the..... 726
- Toothache, permanent relief of.... 125
- Tracheotomy, air into the veins... 509
- Trismus Nascentium..... 127
- Tumors, new mode of diagnosing.. 372
- Tumors, instrument for diagnosis of 568
- Turning, an essay on..... 193
- Typhoid fever at Geneva in 1846-7 431
- Typhoides febris, account of... 465, 639
- Ulcers, treatment of by firing.... 506
- Ulcers, cancerous, treatment with chlorate of potass..... 508
- Urethra, extraction of a pin from.. 373
- Urethra, chronic discharges from.. 125
- Urethra, process for finding after amputation of the penis..... 185
- Urinary changes, diagnosis of.... 206
- Urinary diseases, treatment of.... 238
- Urinary bladder, case of inverted.. 48
- Urine, albuminous, caused by use of cantharides..... 691
- Urine, means of preventing its corroding action on the skin..... 635
- Urine, incontinence, treatment of.. 185
- Urticaria, pathology of..... 689
- Uteri os, diseases of..... 695
- Uterus, inflammation, ulceration, and induration of the neck of... 310
- Uterus, inflammation, &c. of the neck of in a virgin..... 666
- Uterus, flexions and engorgement of 124
- Vagina, bifid..... 446
- Vagina, double, two cases of..... 170
- Vagina, occlusion of..... 123
- Vagina, bloody vesicle of the..... 305
- Variola, vaccinia, varioloid, &c... 689
- Veins and lymphatics, outlines of.. 753
- Vera Cruz, mortality of..... 571
- Vermifuge syrup..... 318
- Vertebrae, rupture of fibro-cartilage and ligaments..... 410
- Vesico-vaginal fistula, treated by caustic..... 742
- Virginia springs..... 624
- Viscera, transposition of..... 762
- Vision, case of uncommon acuteness of..... 121
- Vomitings, nervous, of pregnant women..... 124
- Vomiting of castor oil injected into the rectum..... 55
- Vomiting, obstinate, during pregnancy, treatment..... 507
- Vulva, follicular, disease of..... 372
- Washington, Dr. death of..... 767
- Wet nurse, mode of providing in an emergency..... 663
- Womb engorged, treatment of.... 317
- Wound, case of gun-shot..... 202
- Wounds, new method for the union of..... 627
- Wound, penetrating and lacerated, of the abdomen..... 656









